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# East Europe Report

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ECONOMY

GERMAN DEMOCRATIC REPUBLIC

#### LABOR ROLE RESTRUCTURED FOR FLEXIBLE MACHINE TOOL PRODUCTION

East Berlin FERTIGUNGSTECHNIK UND BETRIEB in German Vol 36 No 8, Aug 1986,  
pp 473-78

[Article submitted by the following members of the GDR Chamber of Technology:  
Prof Dr of Engineering E.Gottschalk; Prof Dr of Engineering D.Henning; Prof Dr  
of Engineering S.Hinz; Prof Dr of Economics V.Trognitz. All represent the  
Otto von Guericke Technical Higher School, Magdeburg. Original title of  
article: "Tasks in Designing Factories and Jobs Concerning Flexible  
Automation in GDR Machine Building"]

##### [Text] Summary

New kinds of requirements to job designing inclusive to the manufacturing process control originate from flexible automated production processes. There have been elaborated tasks in designing autonomic manufacturing units having low servicing demands by research work. The most important of these tasks are surveyed in this paper.

##### 0. Introduction

At the present time GDR machine construction is largely characterized by single, small and medium batch production. This amounts to some 75-80 percent of its output volume. The rising demand for customer specific product modifications and the product renewal rate--required as a consequence of innovations--are unlikely to allow in future either a general increase in series volume, even if standardization were to advance further. Indeed, we are far more likely to see a rise in product diversity. At the same time we are being confronted with the demand for better quality and quick deliveries.

Efficient production in the conditions prevailing in the GDR continues to call mainly for

- Manpower savings with the objective of needing extremely few operators,
- Lowering specific materials and energy costs,
- Minimizing production costs,

- Guaranteeing optimum operating conditions,
- The full utilization and resolute further development of the working peoples' labor capacity.

These tasks can be accomplished in future only by flexible automation in production and production preparation.

In recent years, the integration of the flow of substances and data into the production process resulted in the evolution of a great variety of construction modifications for integrated fabrication (1), among others in more than 40 investment projects since 1978, that are highly flexible with respect to product fluctuations and changes in technological processes (operations per work piece, lot size, production time, and so on).

As automation is bound to proceed gradually, the following approach has had good results at the international level:

- The establishment of autonomous flexibly automated manufacturing cells as the first step toward production requiring few operators, and, therefore,
- The establishment of flexible automated and integrated manufacturing processes involving several automated manufacturing cells that are so linked one with the other by a common control and transportation system as to allow on the one hand for automated manufacture, and on the other for the realization within a given section of different processing tasks related to various work pieces.

The flexible automation approach will be characterized by the gradual involvement of more main and ancillary processes. In other words, the sections anterior and posterior to component production will also be automated, so that--most importantly--the production preparatory sections are involved, too. It will therefore be necessary to include all experiences gained with regard to the computer backed planning and control of production systems for the development of general CAD/CAM systems and computer integrated manufacturing (CIM). These requirements present new challenges to operations and labor organizers.

## 1. Operation Organizational Tasks for Flexible Automation

The creation of the prerequisites for the "factory of the future" that will be characterized by total computer integration, calls on the present-day operations organizer even now to consider how to best achieve this objective.

The appreciation that significant rationalization potential is still available in the sphere of the organization and control of materials flow and in the sphere of data processing and equipment, ultimately leads to CIM. A general CIM system requires, among others, the comprehensive organization and control of materials flow, in other words flexible manufacturing cells and systems, integrated transportation systems and storage sections must increasingly be

interpreted as a "production system" that needs to be planned as a whole and implemented step by step.(2)

The search for proper expansion stages on the basis of an overall conception "automated machine construction operation" thus becomes an important national research task in the organization of operations. The research begun in 1981 at the Otto von Guericke Technical Higher School, Magdeburg, regarding the "creation and organization of autonomous manufacturing structures for production needing little manpower" will therefore continue to be resolutely pursued through 1990.

The first research results about the technical-organizational levels of autonomous manufacturing structures are at hand now. They will have to be tested and further developed from the aspect of continuing automation, so that we may be able to quickly make available to factories decisionmaking aids for the desired technical-organizational standard of production.

Central decisions on important automation projects will also be objectified thereby and effectively operational in terms of the national economy.

The technical organization of the various manufacturing systems must proceed in coordination with the organization of the overall system. Increased attention is due in particular the organization of materials flow, interface organization, supply and waste disposal in integrated cycles.

Economic requirements are increasingly important with regard to the system organization of automated manufacturing sections. Due to their priority orientation to processing, current efficiency considerations are not really suitable decisionmaking aids. Strategic appraisal criteria, answering the question of sensible automation in economic terms, must be emphasized. Automated manufacturing cells, manufacturing systems or entire automated production systems operate only as well as their organization has been thought out and translated into organizational software.(2) It is therefore imperative even now to create the appropriate software and include existing island solutions in overall systems. This calls for the integration of computer systems. The still persisting difficulties with regard to the coupling of systems can be increasingly managed by common concepts. The present multitude of programs represents another obstacle to integration. Efforts for the achievement of the compatibility of operational systems and computer languages are important steps toward the realization of CIM.

Flexible automation also offers new challenges to technical availability. Considerations of reliability taking account as much as at all possible of the nature of the system and the creation of comprehensive maintenance systems therefore represent another key research topic with regard to the organization of operations. Manufacturing process control is particularly important.

## 2. Manufacturing Process Control for Flexible Automated Fabrications

Structural units with flexible automation present greater challenges to manufacturing process control than conventional fabrications. The possibilities for operational deviation control and subjective support for

lacking organizational processes diminishes as the result of cutting the number of operators down to shifts without any operating personnel. In addition, the observance and utilization of the objective laws of the manufacturing process are more imperative than in relation to conventional production, because the greater investment costs need to be justified in economic terms.

In the case of such minimum operator demand manufacturing processes, the data flow must be organized simultaneously and as a uniform system for the planning, control and management of the main and ancillary processes.

The following are typical for the organization of the data flow system:

-- The combination of organizational and technical control in hierarchic multiple level concepts of different level steps

-- The separation of external and internal control influences arising from the hierarchic division

-- The control of the autonomous structural units by directing stands and the subsequent permanent exchange of data between the manufacturing process and the directing stand until on-line/real time operation.

Due to the developing CAD/CAM systems we increasingly witness the inclusion of the autonomous structures for minimum operator demand in total enterprise data processing, ranging from design, technological and materials-side production via production planning to the use of common data bank systems. The level steps of the data flow systems now reveal combinations of conventional elements with documents and oral instructions, with computer aided and computer run procedures. As the result of the automation of system elements by microcomputers, computer aided level steps of organizational control and computer run level steps of system control tend to be increasingly prevalent. The multilevel concept of manufacturing process control (Illustration 1), co-developed by Magdeburg Technical College, is typical for these level steps that are found in all projects. It is a hierarchic computer system, and with its help the unity of organizational and technical control is realized by coupling decentralized and centralized computer equipment and the pertinent software.

The functions of manufacturing process control--scheduling, manufacturing control and fault clearance--are to be discharged either computer aided or computer run within the level of the directing stand and the process level. This calls for extensive software, an integral element of enterprise CAD/CAM systems. The need for software is particularly great with regard to scheduling, because--depending on the size and complexity of the structural units--, this also must realize planning functions when dealing with the monthly plan issued it as an actuating variable.

Software implements control commands for the complex structure of the manufacturing systems by tasks such as flow ascertainment, deadlines, load scheduling and load equalization for machine groups, the ascertainment of the appropriate or optimum insertion sequence of manufacturing orders, machine and

machine group allocation, scheduling of the transportation, warehousing and handling processes (including availability, commissioning, control commands related to handing over for processing), scheduling of VWP supplies, general supplies and waste disposal, quality control and maintenance.

We have learned from experience that we are merely at the beginning of a general data flow system, and that some managers tend to underestimate the necessary cost of models, algorithms and programming. This results in mishaps and considerable losses of efficiency when the manufacturing systems are realized. Software is oriented to the quantity, time and cost appropriate implementation of production. The proper definition and fulfillment of the objective decides the stability and operability of the manufacturing systems:

- Minimalization of machine downtimes and
- minimalization of lay time of material for processing

represent the decisive objectives of the models as fixed in the modular program systems (MPS) of the research center at the Machine Tool Construction Karl-Marx-Stadt as maximum continuity and minimal cycle duration, as the optimum of passage time, lay time and downtime.

The operations and labor organization sections are working on these problems of the manufacturing process control of autonomous structures for minimum operator demand. Using the hardware base (Illustration 2) available by way of the CAD/CAM center at Magdeburg Technical College, their research is directed to the following aspects (among others):

- The organization of directing stands in machine construction and foundries
- Labor science aspects of directing stand work
- The use of decentralized computer equipment to rationalize controls
- Mathematical modeling of the processes to arrive at control strategies
- The creation of rational enterprise data compilation systems to replace documents and oral instructions
- The inclusion of production process control in CAD/CAM systems.

This results in a standardized method of considering the organization, control and maintenance of minimum operator demand manufacturing structures.

### 3. Problems and Tasks of Labor Organization in Flexible Automation

Automation involves many problems for the person of the operator and the organization of his working conditions. They largely arise from the fact that the individual is step by step or quite suddenly replaced as a direct component of the production process, and that consequently his immediate work functions and the demands made on him change considerably. It has long been

shown that he does not thereby become "superfluous," as has sometimes been assumed. On the contrary, here also he is and will remain the main productive force and indeed provide, maintain and further develop the prerequisites for the automated manufacturing process. Of course many workers are released due to automation and as per the plan transfer (willingly and purposefully) to another sphere of social labor, where they are urgently needed.

Others, and that applies specially to flexible automation, remain in the process and are assigned functions of much greater importance. It is imperative to fully utilize the greater technological opportunities--for example by quick and safe work on the frequent adjustments of the machines to various orders by working out and correcting programs, by greater vigilance with regard to breakdowns and damages that tend to be increasingly injurious from the aspect of volume and effect. Consequently greater demands are made on his skill, thoughtfulness, combination, labor discipline and conscientiousness. Flexible automation therefore directly requires new working conditions and prerequisites at a higher standard. On the other hand it does itself offer significant opportunities for their evolution and realization. (Table 1)

These positive aspects of flexible automation on working conditions directly affect the economic effects (lowering of the total expenditure of live labor, the better utilization of the time fund of the working people and the materials) and the social effects (increased identification with the job, better job motivation and attitude to the job, the development of the personality). However, we have definitely learned from experience that these effects do not necessarily or automatically arise--they presume the definite appreciation and utilization of the above mentioned requirements and opportunities as well as pertinent and resolute influence exerted in the preparatory phase, during the operation and preservation of the automating solutions. Concretely this means:

- Right from the start and sometimes as a matter of priority, all measures related to scientific-technological progress must be based on labor science/labor organizational requirements.
- The guarantee of the unity of the economic and social efficacy of automation requires resolute influence being exerted by the organization of labor. This presumes concrete knowledge of the general developmental trends of automation and the resulting new conditions for human labor, such as Voelker (3) has worked out.
- Consistent interdisciplinary cooperation between designers, technological planners, manufacturing technologists and others on the one hand and labor engineers/labor organizers must be realized at an early stage in the preparation of automation measures and subsequently steadily pursued.
- When working out the objectives of automation, it is necessary to take into account the qualitative aspect of the labor capacity of the working people as an important starting dimension in order to select the most suitable workers, as fully as possible utilize and resolutely develop their labor capacity and realize their absolutely necessary standard of preparation.

-- The earliest possible active involvement of the working people in the preparation and realization of automation project is required to create important prerequisites for their willingness to constant cooperation, their greatest possible commitment and responsibility at the highest standard.

The question about the approaches to and methods of flexible automation, for example the decision about the CAD/CAM systems to be implemented, represents not merely a technical and economic assignment but also a labor science task with a view to automation appropriate labor organization. In flexible automation, too, we must be concerned with providing the prerequisites and conditions for the optimum interaction of the constituent elements in the labor process: Worker, working tools, materials. Precisely with respect to the preparation, operation and preservation of flexible automated manufacturing systems and due to the complexity of this task, we need the equally complex development, conception, planning and organization of the actual automation measures, based on the integration of production technological, engineering, economic, organizational and labor science factors. Autonomous structures with minimum operator demands (AFS) in their characteristic manifestations as flexible manufacturing cell, manufacturing system and flexible assembly line (4)(5) require the accomplishment of labor organizational tasks in the following directions (Illustration 3):

#### Deployment of Workers

Rational solutions require the thorough analysis and organization of the (expected) tasks to be accomplished by the operator in the various part systems of flexible automated manufacture, in particular mental efforts involved in data transmission, preparation and production as well as supervisory, controlling, regulating, process preparatory and process subsequent actions. Some of the relevant problems and tentative solutions are already known (3)(6)(7). A standardized methodological procedure is gradually emerging for the working out of manpower solutions, and this provides an important basis for computer aided solution elaboration (8).

#### Organization of Work Places

The organization of the equipment of work places, the work space and function spheres for the worker decides the manual and mental labor expenditure as well as the AK [worker] employment and capacity for organization within and between the part systems of flexible manufacture. With regard to the organization of function spheres, account needs to be taken of the fact that some function points have informational relations with the computer for the purpose of data reception and transmission. It is therefore necessary to try and establish easy access to the computer and simple man-computer communication.

#### Man-Machine (Computer) Communication

The decentralization of computer aided control processes in the sphere close to production is an essential starting point for the realization of labor science requirements. Possibilities are arising for the combination of process planning and process executing labor functions. Consequently jobs

present greater demands on skills. These jobs also involve the concentration and preservation of knowledge of the conditions of the entire course of manufacture.

#### The Organization of Collective Work

The emphasis here is on the organization of the most rational organization of labor within, among and with work collectives. The orientation is to the establishment of collectives manageable from the aspect of labor organization, with due consideration their relatively autonomous nature.

#### Preparing the Workers

The timely selection (based on accurate knowledge of existing skills) and preparation of all workers needed represent indispensable prerequisites for the smooth and rapid start-up of flexible automated manufactures. Promising aids for solving these problems are available (9) and should be utilized for future automation projects, and so on, in order to better use the available labor capacity and resolutely as well as rationally further develop it.

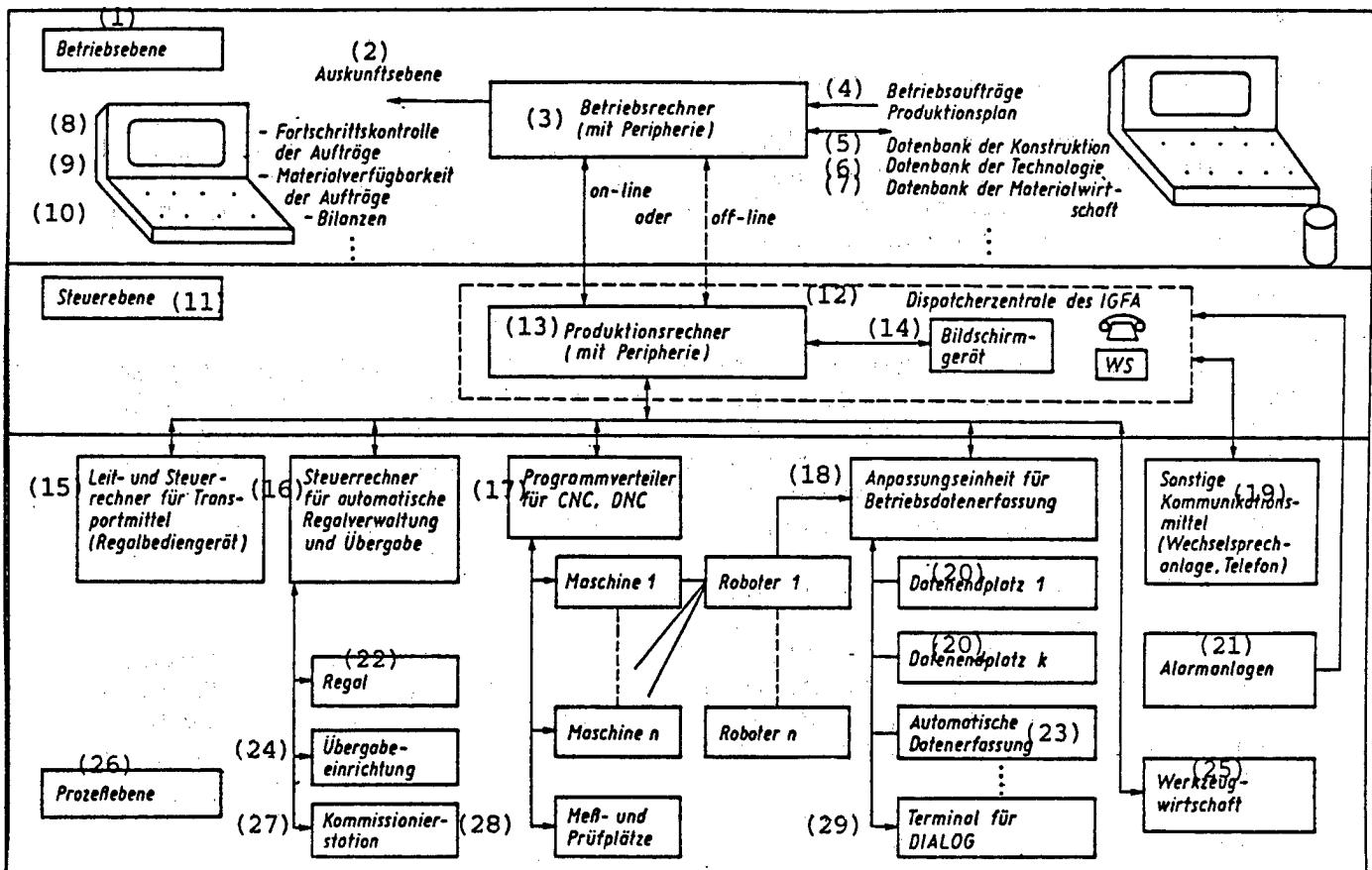
#### Bases for Effective Performance Incentives

Effective material incentives for the workers--also and specially for flexible automation--presumes the ascertainment and use of incentive effective performances indicators (LKZ) and wage incentives (9). It is necessary here to start from the exact determination of actual possibilities of affecting the work result.

#### 4. Summarizing Conclusions

Flexible automation and the pertinent modern structural manufacturing units will be essential features and, at the same time, the reflection of scientific-technological advances in GDR machine construction. The available wealth of perceptions is daily increased, new solutions and manifestations are developed, and these in turn represent new challenges to operations and labor organization. New and more and more rational methods and aids for operational planning and production process control will therefore have to be developed. The tools of labor organization with regard to analyses, organization and appraisal must be further developed in response to new conditions and requirements, for instance for the use of computer aided procedures, so as to keep up with the rising speed of the innovation process. In other words they must be more emphatically oriented to the foresighted development and testing of methodological bases. This represents a real challenge to all those engaged in the fields of operations and labor organization. Still, it is the combines and enterprises who have the decisive task to perform: By properly organized flexible automation they must demonstrate their appreciation of these necessities in all their amplitude for the guarantee of manufacturing and labor processes that are highly efficient from economic and social aspects. They must also be prepared to make available for this purpose all the resources needed as well as to employ and fully back highly skilled special cadres.

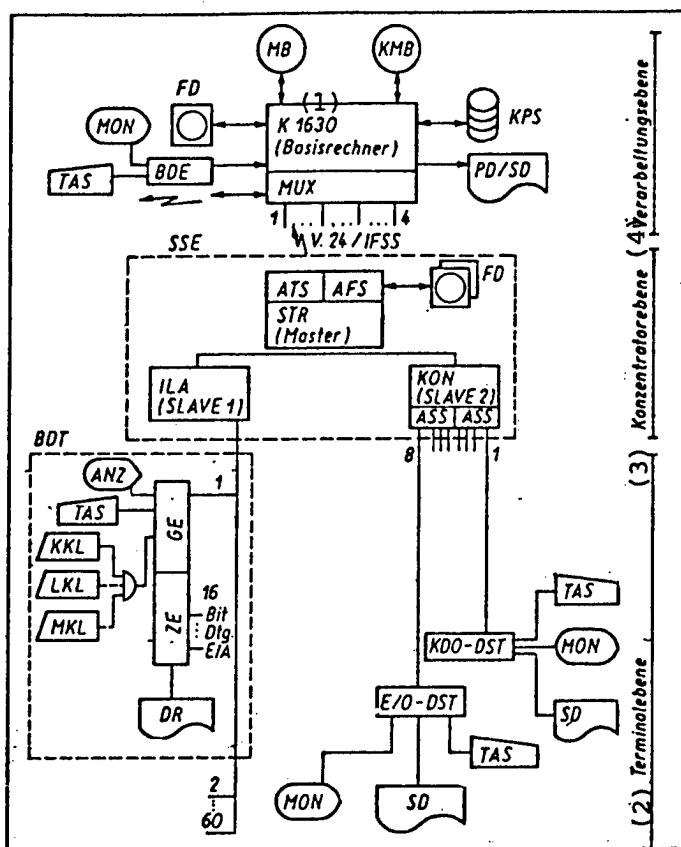
Illustration 1: Multilevel Concept of Manufacturing Process Control



Key:

1. Operations level
2. Information level
3. Operations computer (with periphery)
4. Operations orders - production plan
5. Design data bank
6. Technology data bank
7. Materials management data bank
8. Progress control of orders
9. Materials availability for orders
10. Balances
11. Control level
12. IGFA dispatcher center
13. Production computer (with periphery)
14. Display terminal
15. Master and control computer for transportation equipment (shelf control unit)
16. Control computer for automatic shelf administration and transfer
17. Program distributor for CNC, DNC
18. Adjustment unit for operations data compilation
19. Other means of communication (intercom, telephone)
20. Data terminal (1 and 2)
21. Alarm equipment
22. Shelf
23. Automatic data collection
24. Interchange equipment
25. Tool management
26. Process level
27. Commissioning station
28. Measuring and testing positions
29. Terminal for DIALOG

Illustration 2: Diagram of the Structure of the DIS A 6422 Data and Information System



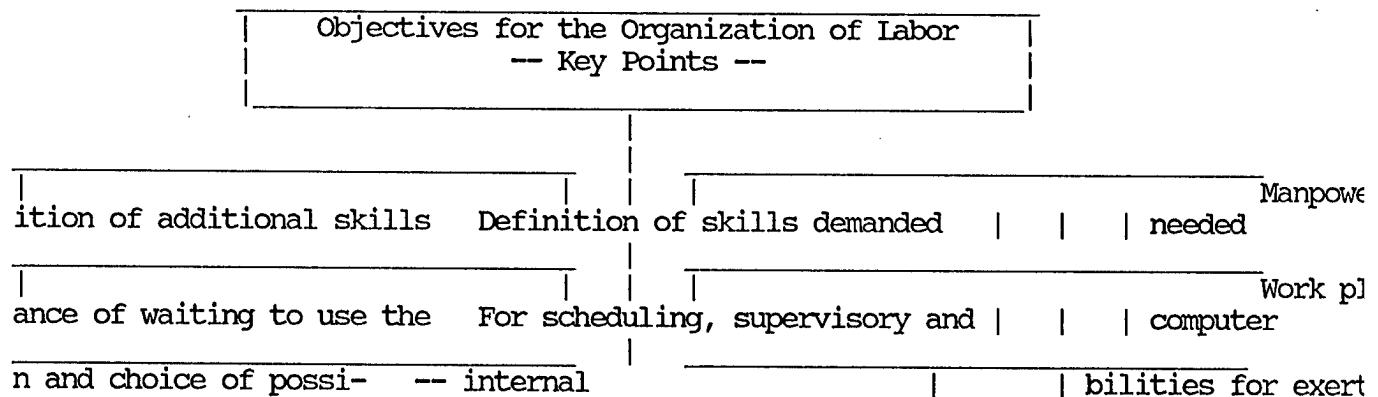
Key:

1. Basic computer
2. Terminal level
3. Concentrator level
4. Processing level

Table 1: The Effects of Flexible Automation on the Evolution of New Working Conditions

Working Conditions	Trend of Effects of Automation Examples
Task	<ul style="list-style-type: none"> <li>-- Diminution of routine operations</li> <li>-- Increase in the proportion of mental activity</li> <li>-- Lowering of monotonous operations</li> <li>-- Enrichment/expansion of the field of operations</li> <li>-- Expansion of the scope of action</li> <li>-- Increased labor motivation</li> </ul>
Occupational Stress	<ul style="list-style-type: none"> <li>-- Abolition/reduction of heavy manual and hazardous work</li> <li>-- Diminution of mental stress factors</li> </ul>
Utilization of the Skill Potential	<ul style="list-style-type: none"> <li>-- Greater challenges to general and special technical knowledge</li> <li>-- Greater opportunities for using skills</li> <li>-- Diminution of jobs with little call for skills</li> <li>-- Rise in the numbers of jobs with greater demand for skills (also in the sphere of ancillary processes)</li> </ul>
Employment of the Workers/ Labor Organization	<ul style="list-style-type: none"> <li>-- Opportunity for expanding collective operations</li> <li>-- More possibilities and greater suitability for organizing operations</li> <li>-- Eliminating the sex specific division of labor (more opportunities for the employment of women)</li> <li>-- Releasing the worker from local ties and the dictates of time</li> <li>-- Improved opportunity for organizing work with respect to the place, time and kind of processes</li> <li>-- Better opportunities for organizing shift systems</li> <li>-- Transition to minimum operator shifts</li> <li>-- Improvement of safety</li> <li>-- Diminution of sources of accidents/damage</li> <li>-- Easier operation of the plant and equipment</li> <li>-- Greater user friendliness of technical resources</li> <li>-- Easier visibility of the location of work places</li> </ul>
Space-time Working	
Working Hours System	
Safety	
Industrial Esthetics	

Illustration 3: Key Trends of the Effects of Flexible Automation on Labor Organization



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CSO: 2300/532

ECONOMY

POLAND

#### ENTERPRISE POSITION IN FOREIGN TRADE STRUCTURE PROFILED

Warsaw HANDEL ZAGRANICZNY in Polish 5-6/85, May-Jun 85; 7/85, Jul 85

[5-6 85, May-Jun 85 pp 13-16, 31]

[Part 1 of article by Wieslaw J. Otta; "The Position of Foreign Trade Enterprise"]

[Text] Mosaic of Interests

#### The Institutional Aspect of Economic Processes

Recognition and effective control of the behavior of businesses has become one of the important theoretical and practical problems associated with the process of the introduction of economic reform. The adequacy of recognition and therefore the quality of conclusions about business behavior depend to a large extent on the chosen direction and the methods used in analysis. The dominant tendency among analysts to regard businesses as objects of central control has had certain cognitive and practical consequences:

- 1) The technical aspects of management are emphasized;
- 2) There is a tendency to see problems only in terms of how they affect the "center";
- 3) There is a danger of losing touch with social reality.

Of limited usefulness to analysis is the model of market (faultless and monopolistic) competition. Explanations of business behavior based on these models and practical recommendations both show substantial shortcomings. This is because these models have been substantially abstracted from extra-economic variables while the environment within which most businesses function is not a market in character. This is also true of foreign trade enterprises for which the market environment (in the full sense of that word) is only part of their foreign environment.

An aspect of economic reality unappreciated in various analyses is the institutional arrangement of the economy, in other words, the economy seen as a system of interactions of consciously acting entities guided by their own interests. It is quite a paradox that this phenomenon is ignored because interest is one of the categories of Marxist analysis of social and economic relations and processes<sup>1</sup>. In socialist societies, political mechanisms associated with interests define the character and course of social processes even within the "nonpolitical" areas of social life<sup>2</sup>.

In order to understand and effectively influence the behavior of foreign trade enterprises, it is necessary to:

- 1) identify those who have interests within the given firm;
- 2) define the character of interests of individual subjects;
- 3) understand the power structure.

### The Institutional Environment of Foreign Trade Enterprises

An open-system scheme of input-transformation-output can be used to classify the subjects of interests in a foreign trade enterprise. Within this scheme, the enterprise acts as a subject transforming the input (of information, energy and materials received from individual subjects of the environment) into output to other subjects. This approach allows one to distinguish within the institutional environment of the firm both input and output sectors. The relations between foreign trade enterprises and the subjects of these sectors takes the character of an exchange. The exchange processes occur according to rules that are set by other subjects that do not have a direct relationship to the enterprise. These subjects form the sector regulating the enterprise's environment.

In the simplest terms, the input sector consists of:

- 1) suppliers who in export trade are domestic producers<sup>4</sup> and in import trade are foreign producers;
- 2) financial institutions (banks);
- 3) employees.

In the output sector, one can distinguish agents and buyers (domestic and foreign). The principle elements of the regulating sector are:

- 1) society as represented by certain organs;
- 2) political and social organizations;
- 3) the administrative and economic "center";
- 4) competitors.

### Interests In the Regulating Sector

Under a socialist system, all sector interests should be subordinate to the general public interest. However, there are specific problems in implementing this principle and the chief one is how that interest is to be articulated. Most generally speaking, this is a question of how effective are the political mechanisms used to express and determine the public interest. One must also deal with the concepts used to define and implement the public interest as presented by scientific research. It is very difficult to take the public interest and use it to establish a cohesive hierarchy of goals for economic entities<sup>5</sup>. Therefore, there is a very real danger of various types of abuse.

Another category of interests in the regulating sector is group interests. Political parties are interested in gaining and keeping political power. Worker interests are represented by trade unions and professional organizations such as the Polish Economic Society and the Chief Technical Organizaction. The interests of other social groups are expressed by many formal and informal organizations.

A characteristic element of the institutional structure of a socialist economy is an administrative and economic central apparatus consisting of the supreme organs of political administration. Its double character must be understood. On the one hand, it is the representative of the general public interest and manages the economy in the name of the public. On the other hand, it is also an entity with its own interests. Actually, one can look at the center as a professional guiding apparatus that shows the sort of behavior typical to any such apparatus because it strives to defend its own position, gain full control over the executive apparatus and avoid risks, etc. In the 1960's, the emergence of interests of the central apparatus was already being pointed out: the professional management was typically trying to increase the size of the system under their direction and identifying economic growth with the actual goal of management in socialism. However, these phenomena were never the object of any deeper study.

We must also point out internal differences within the central apparatus. The changes made to the administrative organization of several foreign trade enterprises in 1971 as well as modifications to the planning system led to the appearance of new foreign trade organizations in the form of branch ministries. We are presently seeing a reverse process in which the founding organ of foreign trade enterprises has become the foreign trade minister.

The last of the afore-mentioned elements of the foreign trade regulating sector is competition. In Polish economic practice, domestic competition for foreign trade never was great. Until the beginning of the 1980's, foreign trade by branch and product type was exclusively limited to special enterprises. This limited competition to a poorly-defined area in which certain enterprises competed over the same products. One can also say that there existed a form of quasi-competition among enterprises representing cooperative and craft associations and a small group of industrial firms that had gained the right to conduct their foreign trade in strict accordance with their own production.

The present situation differs in that:

- 1) suppliers and/or domestic buyers can formally choose their own foreign trade enterprise;
- 2) the scope of foreign trade concessions has been increased.

This has created certain opportunities for enterprises to compete for clients (suppliers and buyers) and the increased number of concessions means that the previous range of action of foreign trade enterprises has been somewhat abridged.

#### Interests In the Input Sector

We will discuss the interests of the input sector in terms of those of the suppliers of export goods and services. According to some studies conducted at the end of the 1970's, the goals of foreign trade as declared by the directors of 107 different industrial organizations were, in order of importance:

- to earn as much foreign currency as possible;
- to improve and modernize their products;
- to sell the greatest amount of goods and services;
- to maintain good relations with their contractors;

- gain the acceptance of the higher government authorities;
- earn more income for the management and employees;
- other.

The implementation of economic reform was supposed to make producers more sensitive to the efficiency of their foreign trade. The results of the fourth poll by the Economic Advisory Council show that the level of profits in export production is decidedly higher than in production for other markets<sup>10</sup>. However, this is not as it might seem because export production is running so high but is the result of soft financing (through balance accounting). This is what gives the "efficiency" interests of suppliers their own unique direction.

In the system of the reformed economy, a substantial problem is ascertaining the extent to which producers are interested in increasing their export production. Incomplete analyses, evaluations and opinions give one reason to assume that:

- the presently-used means of increasing the financial attractiveness of export trade are not a strong enough incentive;
- the producers of export goods and services are more interested in achieving a satisfactory level of export which is defined as a share of foreign-currency deductions and minimal need for the producer's own foreign currency<sup>11</sup>.

No analysis of the interests of producers can omit the interests of the employees producing the export goods and services. Part of their interests lie with formal earnings from export production. The present concepts now use the principle that export profits are not accounted separately and therefore, there is a lack of specialized and individual export incentives. The instruments presently used to stimulate the employees of industrial enterprises are:

- 1) exemptions from the State Professional Activation Fund for export producers;
- 2) income tax deductions that can be used in certain cases to give worker bonuses;
- 3) the task award fund of the foreign trade minister.

One hears it said that these solutions do not motivate workers and managers to increase their export production. Without any deeper study of the problem, it would be hard to say how justified such opinions are.

Some employees of export companies receive other benefits than higher pay and these include foreign travel the financial results of which greatly increase the black-market prices of foreign currency and shortages on the domestic market. For example, it is often said that many construction firms would find it hard to hire their employees unless they could promise them assignments abroad.

The next element of the input sector is the employees of foreign trade enterprises. They have a dual role in which they are both part of the enterprise's resources (as personnel) and an element of its environment. They make free decisions about employment within the firm and they also determine the extent to which they will be involved in the formal activities of the company<sup>12</sup>. One can assume that material considerations such as their formal wages as well as foreign travel benefits have much to do with the employee's decision to "participate". There are

three different examples of how employee interests have a substantial influence on the behavior of the entire enterprise:

- 1) in one company, the resistance of the employees led to the rejection of a plan for "geographical" organization (which was, in the opinion of its authors, more rational for "branch" organization and gave an "equal" chance for attractive trips, etc.<sup>13</sup>);
- 2) in another company, the pressure for travel reached pathological dimensions<sup>14</sup>;
- 3) it has been observed that in the decisions of worker self-management, there is a tendency to give preference to current wage interests at the expense of the company's growth needs, etc.

At the same time, the degree to which workers are involved in company activity seems to be connected with "higher" motivations. The results of psychological and sociological studies have shown that as civilization progresses and workers gain greater education and professional skills, they begin to take a greater interest in self-realization, social life and personal dignity, etc. We can now say that these values play an essential role in guiding the behavior of employees in modern Poland<sup>15</sup>.

A specific group of employees are directors. This group has its own particular interests.

Directors work to achieve:

- 1) cognitive security through a reduction of the complexity of problems (such as schematic organizational ideas), the introduction of routine and bureaucratic procedures, the choosing of satisfactory solutions rather than optimal ones, giving preference to partial solutions at the expense of comprehensive ones and avoidance of new problems, etc;
- 2) social (interpersonal) security by means of achieving stable interpersonal relations, etc.;
- 3) political security (preservation of their formal status and authority) by controlling the sources of power such as resources, the hierarchy, the flow of information, etc.<sup>16</sup>.

Another characteristic feature of the behavior of directors, especially those at the middle and lower levels of management, is the preference given to the interests of the people that they must manage at the expense of those of the company as a whole. This type of suboptimalization is not necessarily an expression of bad will<sup>17</sup> but just the lack of proper qualifications or right information.

One of the specific components of a foreign trade enterprise's input environment is the banks. In the management system used up to 1982, the banks acted as monitoring organs for the central government but under the changes introduced with economic reform (banking law), their status changed. They were supposed to become organizations interested in the profitability of their

financial operations but practice has shown by now that banks still play an important role in administration and control of business. This is partially the result of the still-considerable administrative control of finance management and the inertia of the banking apparatus.

#### The Interests of Buyers

The output sector of the domestic environment of foreign trade enterprises is made up of the buyers of imported goods<sup>18</sup>. It seems that the buyers' interests vary in relation to the character of the source of foreign currency used to finance import trade. This source can be centrally-allotted foreign currencies or decentralized import finance funds from foreign currency deductions, foreign currency credits (the Trade Bank) or currency bidding.

In the case of central allotments, we can expect that imports will continue to act in a way detrimental to good efficiency as they always have. Most probably, there will be a tendency to bid for allotments and to pressure for "hurried" utilization of limits especially if there occur any discrepancies between the formal allotments and the opportunities for actually exploiting them.

The presently-used solutions concerning decentralized currency sources are much closer in character to the importers' own funds. We must above all stress the generally unquestioned solid reputation of the Trade Bank in accounting for foreign currency deductions and the possibility of charging interest on deductions in temporary quasi-accounts. We are seeing much more careful decisions on import trade and a growth of interest in the quality of goods, their prices, where they are bought, contract terms, etc. Therefore, foreign trade enterprises can encounter increased pressure from this category of buyers who may even go as far as to interfere in the terms of contract.

#### The "Systems" Interests of Foreign Trade Enterprises

The last element in the mosaic of interests in foreign trade institutions are the interests of the enterprises themselves which means those that apply to the enterprises as a whole.

The interests of an enterprise are associated with the preservation and growth of the management system. Laws regulate the functioning of reformed management<sup>19</sup> and stipulate the following legal principles for goals for state-owned enterprises:

- optimal satisfaction of public needs;
- efficient management (and accounting);
- maximum profit;
- making good use of public property;
- planning;
- independence;
- self-financing;

-- self-management;  
-- competence of the company director<sup>20</sup>.

The final document of Group 8 of the Economic Reform Commission formulated the goals that are to be served by economic reform in foreign trade and they are greater export trade, more efficient import trade, more efficient foreign exchange and achieving a profitable role in the international division of labor<sup>21</sup>.

One might ask whether the above expectations really concur with the real interests of foreign trade firms. If we assume that the interest of these firms lies in greater export trade, there are factors that will encourage more export transactions and one of them is making the company's earnings dependent on its sales. However, greater earnings can also be produced bidding for the margin of profits and/or commissions. This can also be arranged by changing currency values, prices, etc. If we consider the second type of expectations, it may seem that there we cannot make firms more interested in more efficient import trade than by allowing competition and/or external control of the prices of imported services. However, with individual monitoring of companies, we can expect to see more bidding.

The influence that transaction prices have (through margins of profit or commissions) on the financial result and the possibility of dividing the negotiated excess of the transaction price over the minimal export price set with a domestic agent make foreign trade enterprises more interested in more efficient export. However, this makes one wonder how effective these incentives are, especially under the wide use of account balancing and under the influence of many other factors that affect the company's profits. The influence that systems changes have on the efficient of the company itself is also not quite clear. Better profits depend not only on greater internal productivity and thrift but also on factors as well. If we are to understand how these systems changes affect company efficiency, we must also know whether the firm has any interest in seeing the structure of the economy changed in a way providing a more profitable place in the international division of labor and whether it is possible to inspire such interest.

The frequent question marks one has encountered in this portion of the discussion show that the "system" interests of foreign trade enterprises are very poorly understood because of the many blind spots, vagueness and unproved hypotheses in this area.

Without understanding the various interests found in foreign trade, it would be hard to efficiently manage that sector of our economy. One can assume that the hidden play of interests and uncontrolled compensatory processes have contributed to the unsatisfactory economic results and the failure of many of the reforms attempted up to now.

## FOOTNOTES

1. See J. Drazkiewicz's "Interesy a struktura spoleczna. Pojecie interesu w marksistowskiej teorii struktury spolecznej" [Interests and social structure. A concept of interest in the Marxist theory of social structure], Warsaw, PWN, 1982.
2. See J. Wiatr and W. Wesolowski "Kszaltowanie sie instytucji politycznych Polski Ludowej", [The Formation of political institutions in People's Poland] in STUDIA SOCJOLOGICZNE, No 4, 1965.
3. The authority of one entity over another is understood as its ability to influence the behavior of the other.
4. For the sake of simplification, this is treated as a single category without subdividing it into suppliers and sub-suppliers.
5. More on this can be found in W. Otta's "Cele i zadania phz" [Goals and tasks of foreign trade enterprises], in HANDEL ZAGRANICZNY, 1983, No 4.
6. For example, B. Minc's "Ekonomiczna teoria przedsiębiorstwa socjalistycznego" [Economic theory of a socialist enterprise] in "Przedsiębiorstwo w polskim systemie społeczno-ekonomicznym" [Enterprise in the Polish social and economic system], Warsaw, PWE, pp 21, 22.
7. See J. Kornai, "Niedobór w gospodarce" [Shortages in the economy], Warsaw, PWE, 1985.
8. In connection with the conversion of most state-owned enterprises into limited partnerships, the foreign trade minister has become the representative of the majority's partner, the State Treasury.
9. B. Wawrzyniak and H. Wiatrowska-Szulc, "Cele i strategia handlu z Zachodem" [Goals and strategy of trade with the West] in ZARZADZANIE, 1980, No 5.
10. The net profit indicators for 1983 were 13.3 for the market, 13.5 for supplies and 29.0 for export trade. Compare this with U. Wojciechowska's "Instrumenty ekonomiczne w procesach restrukturalizacji gospodarki" [Economic interests in the processes of restructuralization of the economy] in HANDEL ZAGRANICZNY, No 7-8, 1984.
11. See, for example, W. Otta "Producenci regionu poznańskiego o problemach eksportu" [Poznań regional producers speak about export problems] in Handel ZAGRANICZNY, No 11-12, 1984.

12. In the terminology of March and Simon, these are decisions about "participation" and "productivity" -- J.G. March and H.A. Simon, "Teoria organizacji" [Theory of organization], Warsaw, PWN, 1964; they agree on the question of the motivations for these decisions (see J. Reykowski "Teoria motywacji a zarzadzanie" [Motivation theory and management], Warsaw, PWE, 1979).

13. See W. Pankow, "Struktura organizacyjna: racjonalny twor organizatora, czy rezultat ukladu interesow?" [Organizational structure: a rational creation of the organizer or the result of interests?], ZARZADZANIE, No 8, 1980.

14. See "Tajniki handlu zagranicznego" [Secrets of foreign trade], PRZEGLAD TECHNICZY, No 9, 1985.

15. See M. Marody and K. Nowak, "Wartosci a dzialania" [Values and actions] in STUDIA SOCJOLOGICZNE, No 4, 1983.

16. See C.E. Sumner, "Strategic Behavior in Business and Government", Boston, Little, Brown and Co., 1980, chapter 8.

17. A conscious choice of action harmful to others (in business and social life) is a relatively rare phenomenon. See R.P. Nielsen "Arendt's Action Philosophy and the Manager as Eichman, Richard III, Faust and Justitution Citizen", CALIFORNIA MANAGEMENT REVIEW, Vol 22, No 3 (Spring 1984).

18. It seems that having dropped consideration of possible intermediaries has not influenced the outcome of the analysis.

19. The laws on state-owned business, worker self-management in state-owned businesses, social and economic planning and finance management in state-owned businesses.

20. A. Walaszek-Pyziol, "Prawne zasady wyznaczajace cele dzialalnosci przedsiebiorstw panstwowych" [Legal principles defining the goals of activities of state-owned business], ORGANIZACJA, METODY, TECHNIKA, No 8-9, 1983.

21. See U. Plowiec, "Handel Zagraniczny" [Foreign Trade], Warsaw, PWE, 1982  
[7/85, Jul 85 pp 8-11]

[Part 2 of article by Wieslaw J. Otta: "The Position of Foreign Trade Enterprise"]

[Text] Power Structure

A foreign trade enterprise operates in an environment which includes other consciously acting entities, all of which are guided by their own interests<sup>1</sup>. The components of the institutional environment of a foreign trade enterprise are:

- 1) public representative organs,
- 2) political and social organizations,
- 3) the administrative and economic central apparatus,
- 4) competitors,
- 5) suppliers,
- 6) financial institutions (banks),
- 7) employees,
- 8) and buyers.

Subjects 1-4 constitute the sector that regulates the enterprises environment while subjects 5-7 are the input sector and the buyers make up the output sector.

All of these entities have their own defined interests. However, their ability to influence the behavior of other entities and therefore their ability to defend themselves and dictate their own preferences, is varied because they all hold their own certain position within the power structure.

#### The Meaning of Public Interest

In a socialist system, the public interest should be the dominant one that takes precedence over all others. However, the shortcomings of political mechanisms and difficulties in forming operations based on the public interest mean that it does not always find itself properly reflected in economic decisions. The lack of good articulation of the public interest is felt by many specialists to have been one of the causes of the various economic, social and political crisis that have occurred in the Polish People's Republic<sup>2</sup>.

Under the economic reform, efforts have been made to give better consideration to the public interest, above all, by giving the Sejm a stronger role in the making of key economic decisions. Similar such intentions guided the establishment of independent groups of experts and researchers such as the Advisory Economic Council whose task is to observe and study social and economic phenomena and evaluate them from the perspective of the public interest as a whole.

However, there is much indication that these representative organs do not have any great amount of influence over the functioning of enterprises. It is the executive orders issued by the central economic administration that influence the real conditions under which businesses act and the problem of effectively controlling the "legislation" of the administration seemingly continues to remain unresolved and is a recurring theme in discussions.

#### The Influence of Interest Groups

The communist parties hold a unique position in the social and political systems of socialist states. In all of these states, their role is defined by constitutional law. The Constitution of the Polish People's Republic states that "the political force leading society in the building of socialism is the Polish United Worker's Party". However, the constitution does not state how that leadership is exercised. Whenever this problem is discussed, it is often

stipulated that the "economy be made independent of politics"<sup>3</sup>. In the view of the persons who support this idea, political interests should above all be guaranteed by the exertion of influence over legislative organs and supervision of the economic apparatus. However, in the present situation, the activity and especially the internal problems of businesses are often examined from a political perspective.

Others say that political organizations should have a greater voice in business affairs. According to T.B. Jaworski, party organizations influence business administration chiefly through:

- 1) party member participation in the work of organs representing the workers
- 2) and party monitoring of the actions of business management<sup>4</sup>.

However, what seems to be the case is that there is in Poland a tendency for party instances to have direct influence over businesses and to regard political control as one of the chief functions of political authority. With regard to foreign trade enterprise, any concise definition of political influence over its behavior would require the undertaking of appropriate studies.

Very little can be said about the significance of other interests groups and how much they influence the behavior of foreign trade enterprise.

This is in part the result of the changes that have been made to social relationships. The events of 1980 and 1981 produced a change in the position of trade unions within the structure of social and political forces and in their influence over companies. The same change occurred with other organizations representing group interests.

#### The Authority of the "Center"

During the process of change within the administration of the national economy, the "center" was deprived of its most important means of influencing enterprise, command planning. Two mutually-independent planning levels were introduced and these were central planning and company planning. However, it is doubtful that any really significant shifts in the power structure were caused by these measures. The low degree of coordination between company planning and central planning has long undermined the value of the latter as an instrument of central administration<sup>5</sup>.

At the present time, the "center" has an extensive set of administrative and parametric means of both directly and indirectly influencing the activity of foreign trade enterprises.

The general framework within which foreign trade enterprises function is set by the central commercial and finance policy which includes pricing, foreign exchange rates and credit, etc. The instruments used here generally influence all economic entities.

There do, however, exist tools that can be used to affect the operating conditions of specific enterprises including foreign trade enterprises. These include the authority vested the founder's organ to dictate to a company tasks connected with realization of international obligations (Article 54 of the law

on state-owned enterprises) as well as decisions to grant foreign trade concessions. Permission to import or export is also a strong means of controlling businesses. With some individual firms, the central apparatus has the right to approve the prices for trade services (in the case of nonremunerative transactions) and decide the rate of deductions to certain company funds such as acquisition funds.

For the "center", another source of its authority over foreign trade enterprises is its right to transform them into partnerships in which the State Treasury represented by the foreign trade minister has 51 percent of the shares. This form of authority therefore relies on property and control of the company's capital resources.

Finally, another very important factor of direct central influence is personnel policy. This does not affect personnel placement within the firm but rather which people will be sent to work abroad. The central apparatus can also indirectly influence an enterprise through its suppliers and buyers. Aside from the general tools described above, the "center" can also use individual means such as government orders, operational programs, foreign currency limits, foreign currency deduction rates, balance accounting and tax deductions.

Generally speaking, the central apparatus has a strong formal position in relation to companies and it can even be said that the foreign trade minister has had his authority over companies increased because he functions as the founder's organ and the representative of the State Treasury. The minister is in a less advantageous position in relation to industrial firms for which he is the founder's organ as he cannot dictate any tasks to them. However, it seems that this has no great practical significance with regard to other instruments.

Under the existing balance of forces, within the central apparatus for foreign trade enterprise one can discern two characteristic features. First, the central authorities relies on its traditional sources of power such as formal authority guaranteed by sanctions and its control of resources. Authority and information are still not a substantial source of power. One cannot see any sign that the foreign trade ministry is turning into a "central staff" for foreign trade as the economic reform assumed.

Another feature is an obvious tendency to individualize the ratio of power between the center and businesses. The center, in this case the foreign trade ministry, is involved in scores and matters with businesses. If we also add the suppliers and buyers of export goods, then its dealings go into the thousands. This inclines one to ask what chance there is of ever putting all of this work into order. One must remember that the power ratio is characterized by mutuality. Businesses have a sort of "negative power" over the central apparatus<sup>6</sup> which takes the form of manipulation of information and the use of various forms of pressure, etc. If the center cannot control its own dealings, then we will see the return of an old well-known situation in which the economy loses any sense of planning and becomes a wishful system of relationships with no control over anything.

## The Role of Domestic Competition

The threat to the interests of foreign trade enterprises posed by domestic competition has above all been brought about by the new system's granting the freedom to a free choice of trade agents. However, this freedom has been limited by a foreign trade ministry decision according to which the choice of exporter or importer can:

- can concern processed goods,
- be made between companies that sell similar products,
- and be carried out on the basis of a cooperative agreement and respective legal agreements.

A foreign trade enterprise that intends to start importing or exporting goods or services not related to its primary area of activity must announce this to the proper authorities so that cooperation can be arranged if necessary<sup>8</sup>.

Quasi-competition for foreign trade enterprise is provided by companies that have gained a foreign trade concession. However, it is hard to see them as real competitors because:

- 1) the concessions are granted to sell one's own production and to purchase whatever imported goods are needed for that production and for that reason, the firms with these concessions are not competitors for trade mediation;
- 2) the economic significance of these firms is not great as in 1984, only about 8 percent of all export trade was conducted by them (1.5 percent of export trade was handled by newly-concessioned firms);
- 3) concessioned enterprises generally only gain permission to export and this permission is contingent upon approval of the terms of contract by the foreign trade enterprise which has up to then sold the products of the given company<sup>9</sup>.

## The Power of Suppliers

Among the factors determining the position of suppliers relative to foreign trade enterprises, there are those that strengthen that position and those that weaken it. The first group includes the factors that reduce the dependency of suppliers on export influences and namely the ease of placing products on the domestic market and the possibility of acquiring central allocations of foreign currency (government orders and operational programs).

The freedom to choose a foreign trade enterprise has also strengthened the position of suppliers. However, it must be remembered that this freedom is restricted by the formal considerations named above as well as the already-established division of work and the paucity of the foreign trade infrastructure has radically reduced the number of options available in this area.

A similar effect has been produced by the possibility of choosing the form of legal relationship between a foreign trade enterprise and its suppliers and the freedom to define the terms of that relationship. However, there are also

limitations here: in every transaction involving balance accounting, the foreign trade enterprise must act as its own buyer. Furthermore, the possibilities of improving its position relative to the foreign trade enterprise by properly formulating the terms of a cooperative agreement are not often exploited by suppliers which is to a large extent because of the fact that industrial personnel lack training in negotiation<sup>10</sup>.

Another trump in the hands of the suppliers is their technical skill and qualifications. The importance of purely technical factors in export trade greatly increases the standing of the suppliers<sup>11</sup>.

A potentially greater influence over the actions of a foreign trade enterprise can be gained when suppliers join a partnership in a case in which the enterprise is a capital partnership. However, it is the ability of the partner-supplier to present his own reasons and convictions that transform this potential influence into real influence because the formal possibilities produced by participation are not that great.

On the other hand, the factors that strengthen the position of a foreign trade enterprise are:

- the supplier's great dependency on export (if they are participating in export production and foreign currency deductions are large),
- a formal or actual lack of choice of enterprise for the supplier,
- an advantage in commercial authority in export activity,
- charter limitations placed by the partnership on its partner-suppliers,
- the enterprise's control of a balanced account,
- the enterprise's control of "attractions" connected with foreign trade such as foreign trips.

Generally speaking, we can say that the foreign trade enterprise's position relative to suppliers has weakened. Changes in the structure of power have not been too great and do not threaten the existing status quo.

#### The Power of Employees

A foreign trade enterprise's position relative to its employees is determined by factors that affect that employee's decision to work for the enterprise and how hard he will work. The first of these decisions is mainly associated with the relative attractiveness of the material benefits that the enterprise can offer its workers. Wages in foreign trade have been generally (except in 1982) somewhat higher than the average wages in Poland. However, the significance of this advantage has diminished somewhat and some other sectors of the economy are beginning to offer more competitive wages. Furthermore, some of these sectors such as the construction industry have begun to offer attractions that were once the strict domain of foreign trade (travel, etc.).

The foreign trade enterprise's position relative to its employees is also determined by their ability to choose their own employers. For example, a foreign trade enterprise based in Warsaw is weaker than others because of the close proximity of other such enterprises within that city and the availability of other jobs that can offer competitive wages and benefits.

The level of employee commitment to their work is of crucial importance to an enterprise. This level of commitment can manifest itself in complete identification with the enterprise's goals but also as apathy, lack of initiative, unwillingness to take risks or assume responsibility or even in actions inimical to the enterprise's interests. An enterprise's ability to influence employee behavior is determined mainly by its ability to provide good working conditions, fulfill the higher aspirations of its workers (by creating opportunities for personal fulfillment at work or participation in decision making) and by the introduction of an efficient system of monitoring and both positive and negative incentives.

#### The Position of Banks

As economic reform is implemented, the banks should lose more and more of their character of financial control organs and become organizations interested in the economic results of business operations. Therefore, the degree of dependency of a foreign trade enterprise will not be determined by any formal or sanction-supported authority of banks but by its own financial situation.

At the present time, there is still a lack of a uniform measure of the financial situation of a foreign trade enterprise. A synthetic measure, i.e. the ratio of the use of enterprise funds to the use of other funds<sup>12</sup>, should be developed in such a way as to make allowances for the financial results of the enterprise, its debt structure and management efficiency<sup>13</sup> as well as the specific nature of its foreign trade.

In discussing a foreign trade enterprise's position relative to financial institutions, it is necessary to point out that the bank has a monopoly on financial resources.

#### The Position of Buyers

The position that the foreign trade enterprise holds relative to its buyers is determined by the same factors that define its position relative to its suppliers. Buyers can influence the actions of an enterprise because:

- 1) they have a free choice of enterprise;
- 2) they have greater (formal and actual) freedom in the disposition of foreign currency resources (especially those made available by foreign currency deduction accounting);
- 3) they are less dependent on imports (if their production requires little imported products, etc.).

However, it must be remembered that the freedom to select an import enterprise is more strongly limited than it is with export enterprises because there is a rather strong tendency to centralize import trade. A buyer's dependency on a foreign trade enterprise is greater when his production needs imported supplies.

This analysis of the power structure in the institutional environment of foreign trade enterprises presents the following generalizations:

- Since the start of economic reform, there have been only relatively minor changes in the status quo;
- efforts to strengthen the formal power of the central apparatus is compensated by the "negative" power of the enterprises;
- the foreign trade enterprises now have a much weaker position relative to domestic suppliers and buyers;
- an understanding of the balance of power in relationships with other entities of a foreign trade enterprise's institutional environment requires specialized empirical study.

#### FOOTNOTES

1. See the first part of this report: W.J. Otta, "Pozycja przedsiębiorstwa handlu zagranicznego w układzie instytucjonalnym. Część I -- Mozaika interesów" [The Position of a foreign trade enterprise in its institutional setting. Part I -- Mosaic of interests], HANDEL ZAGRANICZNY, 1985, No 5-6.
2. See W. Morawski, "Reforma gospodarcza w Polsce" [Economic reform in Poland], STUDIA SOCJOLOGICZNE, 1984, No 2.
3. Ibid, p 50.
4. See T.B. Jaworski, "Demokracja w przedsiębiorstwie" [Democracy in business], Warsaw, KiW, 1984, p 32.
5. See W.J. Otta, "Zwiazki zarządzania przedsiębiorstw z systemem kierowania handlem zagranicznym" [Connection between the administration of foreign trade enterprises and its direction], HANDEL ZAGRANICZNY, 1978, No 4.
6. For more on the subject of "negative power", see J. Staniszkis "Odmiany władzy" [Types of power], STUDIA SOCJOLOGICZNE, 1975, NO 2.
7. The statement that there is no center for coordinating management was universally expressed by company directors polled before the introduction of martial law. See L. Kolarska-Bobinska, "Centralizacja-decentralizacja-interesy" [Centralization-decentralization-interests], PRZEGŁAD ORGANIZACJI, 1985, No 1.
8. See U. Płowiec, "Handel zagraniczny" [Foreign trade], Warsaw, PWE, 1982, pp 13-14.
9. Many concessioned enterprises have complained about their intermediaries up to now. See T. Hermanowski and A. Miskiewicz "Warunki wzrostu eksportu w opiniach producentów regionu katowickiego" [Katowice region producers' opinions about the conditions for a growth in exports], HANDEL ZAGRANICZNY, 1984, Nos 11-12.

10. See W.J. Otta "Producenci regionu poznanskiego o problemach eksportu" [Poznan region producers on export problems], HANDEL ZAGRANICZNY, 1983, No 3.
11. See W.J. Otta "Sluzby handlu zagranicznego w przedsiebiorstwach przemyslowych" [Foreign trade services in industrial enterprises], HANDEL ZAGRANICZNY, 1983, No 3.
12. See W. Szczerek "Rozszerzyc zakres analizy bilansu" [To Broaden the range of balance analysis], RACHUNKOWOSC, 1964, No 12.
13. See E. Wozniakowska "Syntetyczne mierniki sytuacji finansowej przedsiebiorstw" [Synthetic measures of the financial situation of businesses], FINANSE, 1984, No 5.

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### SELF-FINANCING AND SELF-MANAGEMENT UNDER NEW MEASURES

Bucharest REVISTA ECONOMICA in Romanian No 27, 4 Jul 86 pp 16-17

[Article by Dr Florea Dumitrescu, governor of the National Bank of the Socialist Republic of Romania: "The Strengthening of Self-Financing and Self-Management in the Light of the Requirements of the New Economic and Financial Mechanism"]

[Text] The Plenum of the Central Committee of the Romanian Communist Party on 23-24 June of the year discussed and approved documents of particular significance for implementing the decisions of the 13th party congress, meant to secure the intensive, harmonious development of the national economy and Romania's transition to a higher stage, that of a country with average development. The Program for the Improvement of the System of Financing and Crediting for Economic Activities and of the Economic and Financial Norms also goes among these documents.

Drawn up on the initiative and under the direct guidance of the party's secretary general, Comrade Nicolae Ceausescu, this program is aimed at increasing the role of the intensive, qualitative factors in economic activity, stimulating the management of all material and monetary resources with high efficiency and responsibility, and obtaining profits capable of providing both the growth of the contribution of the production units to forming society's general funds and the resources needed for self-financing. In the speech given at the plenum, Comrade Nicolae Ceausescu stressed clearly the purpose of the new measures adopted in the field of financing for economic activity: "Through the new measures it is intended that all units will provide all or most of their financing from their own income, with credits being cut drastically." As it says in the speech, the program for improving the self-financing system and the new financial measures seek to eliminate waste and to establish mandatory financial norms for all fields of activity.

Indeed, on the basis of the orientations and instructions gotten from the party leadership, synthetic norms were drawn up for the main branches of the national economy with regard to the average costs set for the main industrial and agricultural products, as well as the rate of profitability, the total expenses per 1,000 lei of commodity output or volume of activity, the circulating funds and credits per 1,000 lei of commodity output or volume of activity,

respectively, and the commodity output or volume of activity per 1,000 lei of fixed assets.

The essence and role of these norms spring from the requirement of firmly applying the new economic and financial mechanism and strengthening the self-leadership, self-management, and self-financing of all units, in the spirit of the instructions of the party's secretary general, Comrade Nicolae Ceausescu, who stated: "We will have to speed up the process of production and sales and shorten the production-commodity-money cycle. We must proceed in such a way that each unit may act to use the resources that it has, the raw materials and other products, to introduce them into production and finish the high-quality output as rapidly as possible, to sell the output, and to collect the prices, the costs of the products as soon as possible. On this basis, each unit is to provide its financing and its means for resuming the production process."

In the context of these requirements, the economic and financial norms take into account a number of major objectives referring to using fully and with high efficiency the existing production capacities and the ones that will be built, intensifying the scientific research activity and increasing its role in solving the economy's essential problems, more strongly increasing labor productivity, and more markedly reducing the consumption of raw materials, supplies, fuel, and energy. At the same time, they are of a nature to provide for the placement of the criteria of efficiency at the basis of all production activity, the achievement of profitability for each product, operation, and service performed, the rapid delivery of and collection for the manufactured production, the elimination and prevention of tieups of funds, the meeting of the financial needs of the units from their own resources for the most part, and the appealing to as low a volume of bank credits as possible for as short periods as possible.

In order to respond to these tasks and eliminate waste, in accordance with the requirements for the strengthening of self-financing and self-management, the new norms for credits and circulating funds were set at as low levels as possible, in strict conformity with the scientifically determined requirements for raising the efficiency of economic and financial activity. Through the new norms it is intended that the rate of growth of the planned circulating funds, that is, of the stocks and expenses for production and sales and, respectively, of the resources for meeting them (bank credits and their own and assimilated funds), be far lower than the rate of growth of industrial output and of the other economic indicators, thus providing a speedup in the turnover of funds and more rational and efficient management of them.

At the plenum, Comrade Nicolae Ceausescu severely criticized, with good reason, the financial, banking, and economic bodies and the management bodies of the economic units for the shortcomings existing with regard to the management of the material and monetary resources entrusted by society, the excessive use of bank credits, and a lack of firmness in applying the new economic and financial mechanism. Indeed, although the ministries, industrial centrals, enterprises, and financial and banking, planning, and technical-material-supply bodies have the task of pursuing and securing the fulfillment of the plan targets with greater efficiency, compliance with the stipulated stocks of raw

materials, supplies, unfinished production, and finished products, the execution of the manufactured production under conditions of quality, and the delivery of and collection for it as rapidly as possible in order to strengthen self-financing and appeal to bank credits as little as possible for as short periods as possible, nonetheless the results obtained thus far are not in line with the requirements. Thus, although a number of tieups of stocks of raw materials, supplies, unfinished production, and finished products were eliminated in the second quarter of this year, nonetheless big tieups of circulating funds still exist in some enterprises due to the failure to fulfill the plan targets and the exceeding of the planned production expenses and due to the failure to collect for and deliver the manufactured production under the conditions and on the dates stipulated in the contracts concluded with customers. For example, on 31 May of this year, there were stocks of raw materials and supplies, unfinished production, and finished products above the stipulated levels at some enterprises in the machine-building industry, the metallurgical industry, the chemical industry, the wood-industrialization and construction-materials sector, and light industry. At the same time, in the case of some enterprises, due to the failure to fulfill completely and on time the provisions in the programs for securing and increasing the quality of products and due to breaches of plan and contractual discipline, there continued to be failures to collect on time and even refusals for goods delivered, services performed, and work done that have as a consequence the reduction of solvency, the slowdown of the turnover of funds, the failure to achieve monetary accumulations, and the failure to form their own funds needed for self-financing.

The precise implementation of the requirements of the Program for the Improvement of the System of Financing and Crediting for Economic Activities and of the Economic and Financial Norms places before the management personnel in the economic ministries the task of taking steps, together with the planning, research, financial and banking, and supply bodies, to finalize, while keeping within the approved levels, the norms for the centrals and enterprises, to completely carry out the program for scientific research, technological development, and introduction of technical progress, to increase the turnover of the circulating funds by fully utilizing the production capacities and the work force, to strictly comply with the consumptions set, to utilize better all material resources, and to steadily achieve the physical output in the planned structure and quality in accordance with the contracts concluded with domestic and foreign customers.

The way in which the stipulated stocks of material values are set and followed in each enterprise is of particular importance in applying the new economic and financial norms approved. In conformity with the provisions of the Law on the Sole National Plan for Economic and Social Development of Romania in the 1986-1990 Period, recently adopted by the Grand National Assembly, in the immediately following stage we will proceed to set the stocks of raw materials, supplies, and fuel and the stocks of unfinished production and finished products in strict accordance with the volume and structure of the physical output planned and the specific consumptions set, to improve the manufacturing technologies, and to reduce the length of time for achieving the output and for delivering and collecting for it.

In order to stay within the new norms, the managements of the enterprises must act decisively to improve the technical-material supply in the sense of limiting the supply to the bare necessities for carrying out production, to reduce the production costs for each product by cutting the consumption of raw materials, supplies, fuel, and energy and the other expenditures, to reduce the stocks of raw materials and supplies, and to prevent any forms of tieups of funds. In order to reduce the stocks of unfinished production, the enterprises must secure the strict observance of the stipulated technologies and of the length of time for finishing production, the reduction of the production cycles, the optimization of the lots put into production, and the improvement of the organization of the activity in each section and workplace. In the case of finished products, action must be taken to shorten the time spent on forming the commercial lots, to optimize the amounts of products delivered, to completely mechanize the loading and unloading operations, to improve and modernize intraplant transportation, and to reduce the length of time for billing and collecting for the products delivered, work done, and services performed. Only by executing the contracted products on time, with quality, and with minimal expenses and delivering them and collecting their equivalent value as soon as possible can the enterprises achieve the profits from which they would secure the growth of their own funds and can they appeal as little as possible to bank credits and, in this way, reduce the expenditures for interest.

The financial and banking bodies will give to the enterprises and centrals effective support in properly setting stock norms and standards that help to speed up the turnover of funds and to raise the efficiency in each unit. At the same time, with a view to precise compliance with the norms for credits and circulating funds, the banking units must strengthen the control both along the line of credits and in the field of noncash payments. In this regard, both in the granting of credits and in the course of utilizing them, it is necessary for the banking bodies to examine with particular attention and care each credit application of the enterprises and to see that they precisely follow the programs for reduction of costs and for growth in labor productivity and comply with the consumption rates, stock standards, and financial norms. At the same time, on receiving the documents for collection for goods delivered, work done, and services performed, it is necessary for the banking bodies to check thoroughly for precise compliance with the contractual conditions and terms, so as to avoid any situation of unfounded postponements of payment or refusals to pay.

For speeding up payments and collecting for production as soon as possible, the National Bank took the step that all documents concerning the delivery of goods, the performance of services, and the doing of work that, in the preceding periods, were sent by suppliers to buyers in proportion to the delivery of goods, the performance of services, and the doing of work are to circulate only through the banks, with strict and constant control being exercised over the compliance with contractual and financial discipline. At the same time, shorter periods for making payments were set both for deliveries in the same locality and for those to other localities, which will lead to a reduction of the volume of credit connected with the documents in course of collection.

The big delays in the sending of collection documents by suppliers to payers, which, in 1985, according to the analyses and checks made by the bodies of the National Bank, were nearly 5 days on the average, and the delays by customers in depositing the payment, which were 4.8 days on the average, will be avoided by means of these measures. In addition, the steps taken in the field of payments seek to eliminate the negative situations in which bills were paid far before the reception of the goods or for incompletely delivered products and payments were even made for products not manufactured by suppliers.

The strengthening of self-management and self-financing requires that in all economic units action be taken with the greatest determination and responsibility to rationally utilize material resources, to establish a strict policy of economy and strict financial discipline, to improve and strengthen the financial and banking control, especially the preventive control, to increase the spirit of responsibility of each work staff in respecting the laws of the state, to manage with maximum efficiency the resources entrusted, to provide greater profitability, and to firmly apply the new economic and financial mechanism.

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#### MODERNIZED WORK PROCESSES INCREASE PRODUCTIVITY IN ENTERPRISES

Bucharest REVISTA ECONOMICA in Romanian No 27, 4 Jul 86 pp 22-23

[Article by Dorin Constantinescu: "A Substantial Contribution to Improving the Plan Indicators"]

[Text] Through the Grand National Assembly's unanimous vote, the Sole National Plan for Economic and Social Development of the Socialist Republic of Romania in the 1986-1990 Period has become law. But, as Comrade Nicolae Ceausescu stressed at the recent plenum of the RCP Central Committee, "The program of measures for the intensive development and better organization of production and labor, the improvement of technologies, and the use of production capacities to the full has shown that it is possible for us to obtain, beginning as early as this year, an extra output of several hundreds of millions of lei by 1990. In fact, we must consider the 5-year plan by starting from the supplementary plan and must take every step so that the activity of all ministries, centrals, and units, of all counties, may be organized in such a way that we may fulfill in the best way the provisions of the supplementary programs."

The formulation of this program of measures, which can be considered the most extensive and comprehensive action to identify, mobilize, and utilize the existing reserves and the immense potential that is offered by the marked introduction of contemporary organizational, scientific, and technical progress, bears the deep imprint of the exceptionally significant contribution of the innovative, revolutionary view of the secretary general of the party. A result of a thorough, complex analysis and a realistic substantiation and of the thought and initiative of the management bodies, specialists, and staffs in the enterprises, the programs of measures--integrated synergically, on a higher level, with those becoming operational back in the preceding years with regard to the rapid growth of labor productivity, the raising of the technical and qualitative level of products, the economization and better utilization of raw materials and energy, and the reduction of production costs--provide for: the modernization of the technological manufacturing flows; the introduction of technologies with high technical and economic efficiency; the growth of the degree of mechanization, automation, and robotization of operations and processes; the improvement of the technological preparation for and scheduling, launching, and supervision of production; the rationalization of the division and preparation of materials; the modernization of quality control and of technical-control technologies; the improvement of the activities of energy

management, maintenance and repairs, transportation, handling, storage, and preservation; the improvement of the organization of production and labor; the application of overall and direct piecework; and the training of the work force. High rates of growth in production and labor productivity, a substantial reduction of material and energy consumptions, a further reduction of production costs, a rise in the efficiency of the utilization of fixed assets, and a rise in the degree of utilization of material and energy resources--all combining their effects to strongly increase national income and to increase the well-being of the whole populace--are provided through the attainment of these objectives.

Throughout the country, over 1,600 national industrial enterprises have set up organization and modernization programs, which include a total of about 62,000 measures. More than half of them, included in the 1st stage, will be applied this year, and nearly 17,000 others will be applied in 1987--which, in the first 2 years of the 5-year period, amounts to over 82 percent of the total, with the rest of the measures being implemented in 1988.

It should be noted that the preparation of such programs, adapted to the specific character of the activity, was also undertaken in other branches during the last period, which creates premises so that the current course of expanding--beyond the level set in the 5-year plan--the process of complex growth of an intensive type may cover the entire national economy.

The growth of the physical output, the speedup of the process of production and sales, and the shortening of the production-commodity-money cycle are directly conditioned by the intensive and extensive utilization of the productive fixed assets, beginning with the detailed preparation for and sensible scheduling of production (with as good a balancing of shifts as possible, also taking into account the achievement of optimal energy consumptions), by the improvement of the organization of the manufacturing flows, by the modernization of the machines, equipment, and installations, by the proper operation of the existing capacities at the projected parameters, by the finishing of the stipulated investment projects on time, and by the putting of the capacities under construction into operation as soon as possible. This will have as an effect a strong rise in the commodity output per 1,000 lei of fixed assets in the basic activity (at the remaining value). From the programs of the enterprises it follows that by the end of the 5-year period the degree of utilization of the production capacities in industry will rise by 14-25 percent; in a number of units these figures still represent reserves for improvement by keeping within the projected operating parameters, but especially by modernizing the fixed assets, which provides for the obtaining of a higher output per unit of time. The use of the capacities to the stipulated degree also takes into account the time needed for doing maintenance, overhauls, and repairs, which must be done in conformity with the stipulated norms in order to avoid premature wear and unplanned stoppages; regarding capital repairs, with a longer duration of tying up fixed assets, it is intended that in the chemical, petrochemical, metallurgical, and construction-materials industries, in foundries, and in other production activities that are big consumers of energy, they are to be done in the November-February period, and in the energy sector, they are to be done in the summer period, when the energy demand is lower.

The 5-year plan provides that the labor productivity (calculated on the basis of the value of the commodity output) in national industry is to rise at an average annual rate of 11.2 percent, that is, by 70.4 percent by 1990. Considering the good experience of the enterprises where the measures for organization and improvement of technologies were applied and the provisions for this indicator in the programs set up according to branches, subbranches, and units, it follows that a doubling of labor productivity will be obtained by 1990, a result that will be of particular significance not only economically but also socially, through the conditions that it will create for increasing the earnings of the working people, proceeding to cut the length of the work-week to 42 hours during this 5-year period, and generally raising the standard of living. A level significantly higher than the average in national industry is to be obtained on this basis--according to the programs--in the first stage (1986) in the ministries of metallurgy, machine building, chemistry, and petrochemistry and throughout the 5-year period in the electrotechnical, machine-building, and chemical industries, that is, in basic branches with technical equipment of the most modern sort, which are starting from an already high level in the campaign to double labor productivity. The chief requirement for achieving this increase consists of attaining completely and on the stipulated dates, in accordance with the needs for applying the measures in the programs, the objectives of scientific research, technological development, and introduction of technical progress, always bearing in mind that the new products and technologies must provide a reduction in consumptions and expenses, a rise in labor productivity, a continual improvement in quality, and a rise in the technical level of production.

The modernization action offers to production a wide field for fruitful collaboration with specialized research and education and the guarantee of applying peak technological solutions (see the box), adapted as well as possible to the specific character, to the features of the processes in each enterprise and having a great deal of efficiency. Such an integration of the creative capacity also lies at the basis of the creation of complex sets of machines, means of automation and cybernation, either for special purposes or for general use. The possibilities noted in this regard have allowed big increases in the physical output of means of computer technology, robots, and manipulators to be established through the 5-year plan, in relation to the provisions in the works for substantiating the directives of the 13th congress. One condition for successfully carrying out the scientific and technical revolution is to raise through retraining the level of vocational and technical training of the personnel in all categories, in all sectors of activity, so that each worker may take at least one training-improvement course during this 5-year period. At the same time, as the secretary general of the party indicated, firmer measures are necessary in promoting the personnel, in distributing the forces better in relation to each one's capacity, but also each one's spirit of responsibility in work.

The rational utilization and the reduction of the consumption of energy and materials and the better utilization of these resources--including reusable ones, through whose recovery and reintegration into the production circuit it is necessary to meet 50 percent and ever more of the need for raw materials in some fields--constitute the surest way to provide the material and energy base

at the level in the plan and the supplementary provisions and to reduce production costs. From the synthesis of the organization and modernization programs it results that each percent of growth in commodity output in 1990, as compared with 1985, will have to be obtained with an increase in total consumption of only 0.33 percent for primary energy and 0.47 percent for raw materials and supplies. Through strict compliance with the consumption rates, through the application of the measures established for redesigning all products and standardizing the components, subassemblies, products, and technologies, through the reduction of technological and nontechnological losses, and through the further promotion of new technologies that are as slightly energy- and materials-intensive as possible and/or provide for the efficient recycling of secondary resources, the degree of utilization of raw materials and supplies will rise by 30-32 percent in industry as a whole by the end of the current 5-year period.

Now, when the organization and modernization programs are in full swing, when the first results obtained have confirmed their validity, the management councils of the ministries, centrals, and enterprises must act decisively and responsibly to apply the measures approved, to improve and supplement them in accordance with the new opportunities that appear, and to shorten the periods of implementation, so that the entire action of improving the organization and modernization of the production processes may be concluded as early as 1988 and the anticipated results, the additional increases set, may be obtained completely in the last 2 years of the 5-year period.

"The steady implementation of the measures provided in the program for the organization of production and labor," Comrade Nicolae Ceausescu stated, "must lead to the strengthening of order and discipline and of the responsibility of the management bodies, of all the working people, as a decisive condition for securing the proper performance of the activity and the fulfillment of the plan in the best way."

"As owners and producers, the working people in each unit and the collective leadership bodies have the full responsibility, in carrying out all the measures, for obtaining maximum production in each unit, for providing stronger growth in national wealth, in national income--the decisive way to generally develop the homeland, to increase the general well-being of the people."

[Box, p 23]

#### Technologies of the Present, Technologies of the Future

The experience of some industrial units, combined with the existing results and those foreseen for the near future from the program for scientific research and expansion of technical progress--both stimulated by the increased capacity to produce on a national level the necessary equipment--has caused many enterprises to provide in their own programs for the introduction or expansion of progressive technologies, some of them unconventional, characterized mainly by a substantial contribution to growth in production (by reducing the processing time), in labor productivity, and in quality and a reduction of material and energy consumptions. Here are a few examples.

In metallurgy: the injection of pulverulent reactive materials into liquid steel; the making of coke in mixed charges with noncoking coal; the injection of coal dust into the blast furnace; the achievement of new types of light and ultralight refractory products; the cutting of continuously cast semiproducts and of billets; the rolling of small sections and of wire at controllable temperatures; and the expansion of cold extrusion.

In machine building: the expansion of precision casting of parts from pig iron with nodular graphite; the casting of components for tools and of accessories for machine tools and hydropneumatic equipment in easily fusible molds; cutting with plasma, with lasers, and on machines with an automatic cycle with a flexible system; thermal deburring (by detonation) and electrochemical deburring; welding in an electron beam; and ionic nitriding of high-precision parts.

In electronics: new procedures for obtaining crystals for optical and elecrotechnical use and for radiation technology and monocrystalline and solar-cell silicon.

In chemistry and petrochemistry: the utilization of superreactive catalysts; the introduction of essentially new technologies for reducing the consumption and increasing the degree of utilization of methane gas and the degree of extraction of useful substances from ore and manufacturing scrap; the obtaining of hydrocarbons from nonpetroleum sources; the making of acicular coke; and the recovery of hydrogen from blowoff gases at ammonia installations of chemical fertilizer combines.

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### NEW TECHNOLOGIES, PRODUCTS IN ENTERPRISES DISCUSSED

Bucharest REVISTA ECONOMICA in Romanian No 29 18 Jul 86 pp 18-19; No 30 25 Jul 86 pp 6-8

[Discussion recorded by V. Boescu and C. Barnea: "Renovation and Modernization of Technologies and Products"]

[Text] [18 Jul 86]

The stepped up pace of renovation and modernization of technologies and products, an element characteristic of intensive development during the current 5-year plan, represents one of the essential factors in increasing the competitiveness of Romanian exports and in improving economic efficiency. Intensified promotion of technical progress, based on implementation of high-efficiency technologies, along with official approval and start-up of mass production of new products with superior performance features, is a priority objective for every enterprise intended to ensure maximum efficiency in use of raw materials and energy resources, conservation of resources, and lowering of production costs, and on this basis increase in profitability.

Considering the importance of this problem and the need for working out a strategy ensuring continuity of action in promoting technical progress, REVISTA ECONOMICA, with the assistance of the Prahova District RCP Committee, recently organized a discussion on the subject of renovation and modernization of technologies and products. Management personnel and specialists of the main enterprises and research and technological engineering enterprises participated in the discussion.

The persons who took part in the discussion were Vasile Nitu, deputy chairman of the Prahova District Worker Control and Economic and Social Activity Council; Ion Pantazi, division head at the Cimpina Petroleum and Gas Research and Development Institute; Dumitru Goidea, scientific director of the Institute of Research and Technological Engineering for Refining; Elena Dumitrescu, design shop head, Dorobantul Enterprise; Constantin Trestioreanu, chief engineer, Heavy Bearing Enterprise; Atanase Niculescu, director, Petroleum Equipment Research and Development Institute; Ioan Petrovai, technological design shop head, Victoria Tire Enterprise, Floresti; Gheorghe Tiu, chief engineer for production start-up, Sinaia Precision Mechanics Enterprise; Victor Lambrescu, technical director, 1 Mai Enterprise, Ploiesti; Gelu Jungu, production start-up engineer, Plopeni Mechanical Enterprise.

## Implementation of New Technologies Requires Suitable Equipment

Victor Lambrescu: The first problem to which I think we ought to pay particular attention in our discussion is both the way in which we use technologies yielding good results in production processes and the action taken to implement new methods increasing the extent of utilization of raw materials and to ensure increase in labor productivity and lower costs of materials and energy in accordance with the modernization programs.

As the most recent party documents emphasize, there is urgent need for introduction of automation, cybernetic applications, and robot systems, which are advanced technology elements, into production processes. Broad action has been and is being taken in this direction. There are units which now have such elements of modern technology, and they are achieving outstanding results from the viewpoint both of improving product quality and from that of economic efficiency.

The problem is more critical under the conditions prevailing at our enterprise. From 80 to 90 percent of our plant's machinery and equipment lacks electronic or robotic systems, and this machinery and equipment must be progressively modernized to the greatest extent possible. We have instituted numerical control for machinery used in mass production, along with an automatic electronically or hydraulically controlled cycles for some equipment, and we are continuing this process. These operations, which have a positive effect by increasing labor productivity and turning out products of higher quality, require time and substantial investment funds. To the extent allowed by the scheduled annual funds, we are taking action to modernize our original equipment. We have thus far been unable through independent equipment procurement to meet our needs for equipment and components such as automation elements, cybernetic systems, etc in order to modernize machinery and equipment.

Why do I bring this problem up? Because both our enterprise and many others have a large number of machines and pieces of equipment which should be modernized as quickly as possible. However, our limited resources prevent creation of the conditions necessary for carrying out this process within the shortest possible time. Both our industrial central and the ministry of the sector should analyze this situation and set specific priorities for large enterprises so as to ensure outfitting with high technology elements as promptly as possible.

Generally speaking, the application of modern technologies presupposes the existence of suitable technical facilities. We have made some progress in this area, but it should be broadened in order to ensure achievement of the performance level we have set for ourselves. To this end, we have initiated the process of developing machinery and equipment of our own to replace machines and equipment we have been importing, as well as that of modernizing equipment procured from domestic suppliers. We have also continued the process of designing special-purpose machines and assemblies. In this area we believe that we will be able in effect to double the capacity of the current department (which will probably grow into a machine tool and assembly factory some time in the future). We will thereby secure research and development resources of our own and reduce the time required for the process extending from research and development to production.

I believe that solution of the problem of implementing new technologies should be closely coordinated with solution of the problem of plant handling, both between departments and within individual departments, that is, between operations. Actual conservation of a significant amount of labor presupposes development of an efficient plant handling system. We have accordingly initiated the process of designing an electrified system of materials handling between the steel and iron foundry and the production departments. Because of the great distances that have to be covered inside the enterprise (more than 2 kilometers), we have considered introducing a platform having its own electrified transport and hoisting system and providing for moving, handling, and unloading of parts containers taken from storage to each production department. Movement is to take place over a critical path determined by calculations for optimization of plant handling between departments. This eliminates handling by means of battery-powered electric trucks or trucks powered by internal combustion engines, releases a certain number of personnel assigned to load and unload these parts, lowers production costs, etc.

#### Continuity in the Research-Development-Production Process

Ion Pantazi: One of the crucial problems of the current period through which we are passing, in view of the rapid pace of development in science and technology, is that of the lifetime of technologies and products. We have the duty of intensifying our efforts in order to keep pace with innovations throughout the world, to say nothing of outstripping them by means of domestic development efforts. Our own experience has shown us the need, in order to be constantly competitive from the engineering and technological viewpoints, for engaging in research and development so that renovation and modernization of production will be continuous, in that other products will be in the development stage on the drawing board and will be under study and research by specialists while a given item is in production. It is not possible to keep pace with the requirements of technical progress without such continuity, constant critical analysis of accomplishments, and comparison of these accomplishments with other similar ones throughout the world.

In this context I should like to discuss some of the technical and technological innovations achieved in the petroleum and gas extraction industry.

To ensure extraction of the largest possible amounts of petroleum or gas, that is, to increase the factor of recovery from oil and gas deposits, particular emphasis is placed on improvement in technologies. We are trying to develop methods more efficient than the existing ones through research and development, including methods based on new physical and chemical principles. These methods include extension of internal combustion into new areas, testing and extension of recovery methods on the basis of biological criteria, use of chemicals to stimulate wells, etc. Such technologies have already been introduced and extended in different areas of the Wallachian Plain, Moldavia, Banat, and Oradea, ensuring significant increase in production of hydrocarbons.

Along with this activity to improve operating methods, we have measures planned for modernization of surface equipment and various original-equipment installations. I can cite as an example the fleet of closed-system separation and treatment equipment based on modular elements and ensuring

loss-free extraction of hydrocarbons, accompanied by more efficient monitoring of the output from each well. Another of our goals is recovery of heat from the compressor stations now in use in the extractive industry and utilization of this heat for technological or social purposes. At the same time, we intend to cooperate with the Research and Development Institute for Petroleum Equipment in automation of surface and borehole equipment used in drilling and extraction activities. This will, of course, require expansion of our current cooperation with the Central Institute of Chemical Research and with other institutes and economic units to improve the products used in drilling, treatment, and stimulation of wells and to increase recovery. We are also persisting in our efforts to improve cooperation with the Research and Development Institute for Petroleum Equipment in order to provide the equipment needed at wells, regardless of whether such equipment is used for directional drilling or for surface operations.

Another problem with which we are concerned is that of increasing the degree of gas recovery from deposits. Although there are no special programs in this area, our studies and activities are tailored to the concrete situation in each region of the country. For example, in the case of deposits of very low permeability from which small amounts of gas flow and expand, we plan to carry out cracking operations to put the well in communication with an area as large as possible saturated with bases, so as to ensure extraction of a greater amount of gas. At the same time, in the case of some deposits of gas that have not been consolidated and from which small amounts of gas are extracted daily we intend to improve the current technology of preventing waste and retaining the gas. This will allow larger amounts of the gas to reach the surface.

We have now succeeded in drawing up a skeleton program, in cooperation with specialists of the Medias Methane Gas Central and the Drilling and Extraction Trust, for areas inside and outside the Carpathians, in order to increase the recovery factor at gas deposits. The great importance of recovery of all hydrocarbons from a deposit is shown by the fact that a single percentage point of increase in recovery of gas represents hundreds of millions of cubic meters, and several million tons in the case of petroleum. This is why we are trying to find technologies for extraction of gas from deposits of very low permeability (from which gases do not flow, so to speak) but ones in which very large quantities are stored. The efforts for working deposits in the more favorable areas are paralleled by research to find solutions leading to working of deposits containing very little gas, or even to extraction and use of gas associated with carbon dioxide in a certain ratio.

We have other activities in progress to provide the economy with gas on a continuing basis, including in winter, when extraction becomes more difficult. Studies have been conducted in recent years above all to determine the areas in which gas can be stored. We have succeeded in storing surplus gas in secure locations in summertime, when extraction of the gas is easier and when consumption is lower. The gas can be taken from these locations and made available to the economy during the season not favorable to extraction.

## Increased Efficiency of Petroleum Utilization by Chemical Methods

Dumitru Goidea: As the opinions expressed in the discussion have shown, improvement in current technologies and promotion of others marked by high efficiency are also concerns of the sectors which utilize raw materials, in the present case petroleum and gas. Increase in the extent of utilization of hydrocarbons can result in development with increased efficiency of dozens of products needed by the national economy. For this purpose studies and research are conducted on a continuing basis to derive the greatest number of products possible from every ton of petroleum in order to broaden the raw materials base.

In order to accomplish this, we plan to improve technologies so as to obtain greater amounts of aromatic hydrocarbons, hydrogen, and, of course, high-octane fuels from the same amount of petroleum at cracking plants. We also intend to collect new fractions for chemical treatment at cracking plants and in the cracking process, such as the C2 fraction, from which we can separate ethylene and ethane, something that has not been done in the past.

In our activities we have broadened research to determine new conditions for the most profitable possible chemical conversion of hydrocarbons. We have conducted experiments in this direction with operation in petroleum chemical treatment processes at lower temperatures or pressures to achieve substantial conservation of energy resources. In the same area we also plan to improve specific items of equipment to allow operation at lower pressures and at higher speeds. We intend to apply these technologies to obtain products of higher quality. A particular technology may be a very good one, but if there are impurities which cannot be separated from the products (and there are enough instances of this problem in chemical technology), we must find better solutions.

The skill level of personnel is a matter of great importance in using advanced technologies with maximum efficiency. The personnel training problem is a particularly complex process. In our opinion, we must first of all employ young people, and then provide them with better support. After all, these young people in effect represent a source of replenishment of professional personnel potential. Secondly, we must see to it that persons with more experience do not come to believe that they have arrived at the limit of their knowledge but will persevere in their professional training.

Another element that to a great extent determines the efficiency of research activities, and for which a good solution has not yet been found at our institute, is the problem of providing research instrumentation. This problem became especially complicated last year. Generally speaking, we may say (and I am referring to our institute in particular) that there is need for instrumentation permitting determination of parameters (such as spectra or structures) with the highest possible accuracy and with automatic data processing.

## Technological Creativity Contributes to Better Use of Domestic Raw Materials

Elena Dumitrescu: A highly important role is played in the textile product sector by promotion of technologies ensuring the manufacture of products of

higher quality that are competitive on world markets and that make better use of raw materials, including recyclable resources. I will give one example in this context. On the basis of the need for greater use of domestic wool in the structure of raw materials used in production of fabrics and for improving the performance features of products, research has been conducted which has demonstrated the possibility of reaching this goal by applying a new straight-flow production line requiring virtually no additional investment. This technology, which has been patented as an invention, consists of using a new fiber called "double-mesh" in spinning mills. This fiber is processed with existing equipment to which a special fixture has been added. This technology improves the feel of the fabric, lowers the weight of the product, and imparts a better finish to the materials produced. On the other hand, application of this technology results in elimination of two subsequent process stages (the fiber goes directly from twisting to spooling for the looms). This means an increase in production capacity, and thus higher productivity and consequently additional output.

Other such technologies have been conceived and designed by our enterprise with its own resources, and there are still others in the planning stage. In this connection I should like to stress the fact that the introduction of new technologies, along with widespread use of others currently applied in production, entails closer cooperation with the machinebuilding enterprises. I say this because a new technology is based indirectly on improved, highly dependable, machinery and equipment. There is a joint Ministry of Light Industry-Ministry of the Machinebuilding Industry program for this purpose, but as yet it is making little headway. On the basis of past experience, I believe that it would be useful to take more efficient action in the direction of outfitting the enterprises in our industry, and ours in particular, with several program-controlled machines which, along with uniform quality for an entire batch processed at a given time, would ensure substantial savings of energy and raw materials, increase in labor productivity, and creation of better working conditions for production personnel.

[25 Jul 86]

Following are new opinions expressed by participants in the discussion on renovation and modernization of technologies and products organized at Pitesti by REVISTA ECONOMICA with the assistance of the Prahova District Committee of the RCP.

#### Optimization of the Research-Development-Production Cycle

Gheorghe Tiu: The Sinaia Precision Mechanics Enterprise specializes in the manufacture of injection equipment for all types of diesel engines produced in Romania. To satisfy customer demands efficiently, our enterprise has been developed and modernized at a fairly steady pace, and is currently in the process of expanding its production capacity, doubling this capacity to turn out products meeting world engineering standards.

One particular action we have taken in the process of modernization and start-up of new production has been product standardization. Products are based on standardized components, which have created the possibility both of rapid adaptation of the product, the injection pump, to new engines

produced, to make it possible to organize all manufacture on mass production lines. By means of the new division, where we are developing special production lines into which we have instituted organization of manufacture on a scientific basis, we are currently developing special production lines, into which we have introduced a number of new technologies such as transfer lines for highly intricate parts. This ensures consistent quality and adherence to the size tolerances for these components so that they will be dependable and interchangeable.

Application of component processing by means of flexible cells and other machining processes, such as thermal deburring by explosion, will permit considerable improvement in the economic indicators of the enterprise. I believe that all these accomplishments will lead to lowering of production costs and to improvement in economic indicators in general.

It has always been the practice at our enterprise to make a very careful analysis of the start-up process for new products to assure maximum use of standardized and modernized elements. For example, in-line injection pumps of sizes A and ZW have been developed on a modular basis in 3 to 12 sections, only the changes required by the specific components of each engine type used being applied to each use. At the same time, great care is devoted to promotion of new products among customers. Such promotion consists of demonstrating performance features and training assembly and operating personnel in special courses both at our enterprises and at customer facilities.

A highly critical problem at our enterprise is acceleration of the process of introducing new products. In this context, timely knowledge of the directions of development and diversification of diesel engine production in Romania provided by the prognostic study conducted by the National Institute of Thermal Engines in Bucharest, for example, has enabled us to prepare for manufacture of the standard-size injection pumps which will be needed in the future.

I should like to make a recommendation in connection with the product introduction process. To reduce metal consumption, until recently we used a number of rolled products, metal sections specific to our product, as counterweights of the speed regulator. We currently receive these sections from the metallurgical plant in sizes much larger than needed. I believe that the metallurgical units should specialize so as to be able to supply rolled products on demand with the size tolerances needed by customers. If this is not possible, I believe that we should seriously consider integrating this production into our enterprise, to ensure significant conservation of raw materials and reduce machining time.

#### Bringing Product Quality into Line with Customer Requirements

Ioan Petrovai: Acceleration of the process of modernization and adoption of new products is necessitated in the case of the Victoria Enterprise in Floresti by the need for bringing tire quality and performance into line with the requirements of the Romanian automotive industry and for making the products competitive on foreign markets. The procedure adopted is specific to the tire industry and consists chiefly of measures aimed in several priority directions: adoption of new standard-size products for all types of vehicles to provide a complete export and original equipment

product range; continuous modernization of standard-size items in production by developing new versions for summer, winter, or all seasons, depending on market demand; improvement in stock equipment and accessories needed to create conditions permitting constant and uniform production and high productivity; redesign of products to incorporate domestically produced raw and intermediate materials and to eliminate imports to a great extent.

There are several areas being given priority attention by our staff. A priority goal is that of increasing the output of tubeless truck tires, which are in great demand on foreign markets because of their high dependability. Another group of problems relates to manufacture of radial tractor tires. The technologies currently applied at the plant are of the conventional type. The majority of customers, however, including farm machinery manufacturers, ask for the radial type of tire, along with widening of the range of 24-inch truck tires. Consequently, we are trying to expand production of tires of these types.

It should be pointed out that one of the requirements for continuous and efficient conduct of economic activities in the tire industry is production flexibility. This characteristic is a direct function of the ratio of product introduction to product diversification, and development of new products keeps this ratio at its optimum value. Diversified production is, of course, difficult to control, exposed to high risk, and is difficult to manage and maintain efficiently. Under conditions of rapid market changes, product diversification and provision of a complete range of sizes and types of tires are sometimes requirements for survival and we must take this fact into account.

Insofar as we are concerned, we believe that the process of product introduction and diversification is affected by a number of factors the combined action of which can contribute toward shortening the process. One of these factors is the manufacturer-customer relations. I believe that cooperation between manufacturer and customer should be intensified so that there will no longer be delays in this area. Thus, it would be useful for customers to state at the outset the performance requirements which new tires should meet, well in advance of the beginning of mass production. At the same time, during the start-up stage, the material interest of both parties is decisive in completing operations and beginning production. This incentive depends largely on the value of the relationship between the performance features of the new product and product cost. This value does not always motivate the manufacturer to make a new product.

Another factor affecting the success of the production start-up process is cooperation with the plants supplying raw and intermediate materials. In the case of a new product these plants must supply either entirely new materials, that is, assortments which suppliers must introduce into production for the first time or materials possessing characteristics different from the current ones which in turn require cooperation with their suppliers. Introduction of a new product is generally a far-ranging process of cooperation among several economic units subordinate to different centrals or ministries. In our opinion, this calls for greater involvement of the technical administrations at these levels in timely and high-quality solution of these problems generated by cooperation. Improvement in the quality and performance of passenger automobile and truck tires, for instance,

depends to a great extent on the characteristics of the cords, the strength elements in tires, whether they are textile in nature (rayon or nylon) or are of metal. Both the Braila Artificial Fiber Integrated Enterprise and the Buzau Enterprise for Wire and Wire Products are taking action in this area to improve the quality of metal cord, but we believe that this process is still taking too long, to say nothing of the fact that the cost of the new types is not always fully justified by their performance characteristics.

Elena Dumitrescu: The technical plan for 1986 includes more than 500 items in the major groups of articles. This represents more than 38 percent of the commodity output value of fabrics established at the enterprise level. The modernization and new product introduction plan is coordinated with the principal plan indicators, in that the plan also includes new articles, designs, and color patterns. For example, the commodity output also includes the value of new and modernized products (sale of which is assured), and this has a favorable effect on labor productivity.

New and modernized products play an important part in the production activities of the enterprise, in that such products ensure ongoing contracts at the level of the entire production capacity. This creates suitable conditions for increasing physical output and labor productivity. At the same time, it enhances the international prestige of the Doborantual Enterprise trademark, proving that the products made here are competitive on the foreign market.

For the purpose of developing new and modernized products, a prototype product development shop has been set up at our enterprise. It works out new models and designs, and in conjunction with the production divisions ensures their production. For this purpose we have available to us a plant research group which, in cooperation with the Bucharest Garment and Knitwear Enterprise, makes available new fibers, finishing technologies, and auxiliary substances (chemicals, dyestuffs) necessary for manufacturing products of superior quality. We also cooperate with the Iasi Polytechnic Institute, the Iasi and Savinesti CFS (which make new fibers available to us), the Central Quality Laboratory, the Confex Foreign Trade Enterprise and Romanoexport, etc.

There are deficiencies in our sector as well, with the result that the process of new product introduction is not always conducted at the level required. These shortcomings include the dependence of the product development shop on the spinning and finishing production divisions, in which capacities reserved exclusively for the shop do not as yet exist; the lack of coordination of the new development programs received from the supervisory agency for individual partners with the available weaving facilities of the production development shop; the fact that the volume of creative development demanded exceeds the design and execution capabilities of new the development facilities; insufficient technical documentation (journals, specialized publications, samples, etc) ensuring familiarization of specialists with all technical and economic innovations throughout the world.

All these deficiencies were discussed both at our enterprise and at the level of the Wool Industry Central. Certain measures, now in progress, were established on this occasion for providing the technical and material

conditions needed for improving the processes of product modernization and upgrading. Implementation of the majority of the measures in question depends on our unit, and so we are acting steadfastly to improve the quality of labor and to assure ongoing development of the spirit of creativity.

#### Production Series Ensuring High Efficiency

Constantin Trestioreanu: As has already been discussed in other contexts here, so do modernization of products and introduction of new ones also occupy an important place in the activities of our enterprise. It is a unit which makes all the heavy bearings needed by the national economy. The product introduction and modernization plan for 1986 covers 106 prototypes, of which seven standard items represent modernization developments. The value of the engineering plan represents 4.6 percent of the value of heavy bearing output.

Generally speaking, the development of new products requires consumption of a large amount of labor, meticulous preparations for production, and scheduling of the manufacture of these new products along with production of the existing ones. Inasmuch as we have no prototype development division, start-up of the manufacture of new products affects the pace of introduction, because it is necessary above all to maintain the manufacturing cycle for basic products. The product introduction plan has nevertheless been carried out, by coordinating this plan more closely with the production plan.

At the same time, the introduction of new products has ensured increase in labor productivity, especially after formal approval and start-up of mass production. Attention is currently focussed on the following aspects of new product introduction: increasing the basic dynamic and static loads on bearings to meet world standards, for example, by transition from the MB to the CA design of radially oscillating bearings with barrel-shaped rollers; reduction of product weight and the specific consumption of raw materials, intermediate materials, and energy (redesign of T 95 axial bearings with conical rollers to T 95-A and R 536, R 544, and R 544 bearings with stamped sheet metal cages, this representing an annual saving of 22 tons of brass); standardization of products on which the preparation of design and process documentation is based, etc.

There are, however, a number of difficulties in this process resulting in the introduction in certain cases of new products lacking the anticipated efficiency. There is, for example, the fact that in certain cases the product introduction plan calls for 1 to 5 pieces of each standard item (original components), this causing difficulties in their introduction into production, primarily because of the prolonged period of process adjustment (which is economically justifiable only when a large batch of parts are made so as to increase labor productivity). At the same time, very short deadlines are sometimes set for the introduction of products requested, because customers fail to include these products far enough in advance in the respective programs. To be added to this is the failure to provide semi-finished articles in the plant's own production (the Ploiesti Heavy Bearing Enterprise has no forge), with the result that some suppliers avoid manufacture of the small number of pieces required in product introduction. Moreover, the Ploiesti Heavy Bearing Enterprise has no toolroom of its own. I

would recommend in this connection that the planning and the equipment and material supply authorities set reasonable deadlines for developing new types of heavy bearings requested, so that the implementing unit will have time to create the conditions needed for complying with the requests. At the same time, I would ask for assistance in speeding up the process of outfitting the enterprise with a forge of its own. This would greatly facilitate the process of introducing new products by substantially reducing the period required for their development.

#### Unified Methodology for Evaluating the Efficiency of New products

Victor Lambrescu: The technical plan of the 1 Mai Enterprise in Ploiesti for 1986 includes 81 targets under the heading of new product introduction. Petroleum equipment has priority among the individual product categories, and is followed by mining equipment. The product introduction and production tasks are closely related, inasmuch as production during the period following this 5-year plan depends on the introduction of new products during the current stage, such as drill rigs for low-temperature operations, equipment to prevent well gushing, etc.

Generally speaking, the new products being introduced are designed so as to make the best possible use of material resources and to incorporate more live labor in their value. However, no methodology has been instituted for evaluation of live labor in new product introduction in comparison to the current production which would be accomplished with the same facilities and for estimation of the period required for recovery of the additional product introduction expenses. These calculations are generally made after the product introduction process has been completed. In view of this situation, it would be useful to have a unified methodology ensuring preliminary evaluation of the cost elements and the efficiency of a new product in current production.

No special system has been organized at the 1 Mai Enterprise for introduction of new products, because new or modernized products are manufactured in the production facilities used for current production. What is done for each new or modernized product is special technical preparation tailored to each product to create the possibility of production with existing facilities. The technical preparation is carried out for each stage of product introduction so that there will be no waiting times following completion of one stage and before another stage begins. For example, during the period in which the prototype of a product is created, measurements are made also to create the conditions required for subjecting the prototype to approval testing.

Deficiencies in making the product introduction period from design to start-up of mass production as short as possible are generally encountered during the prototype development period. The following are some of the reasons for these deficiencies.

First of all, there is failure to coordinate the various cooperation processes during the same period of time with those scheduled for the prototype. Scheduling of actual creation of the product is consequently deferred until conditions have been assured for conduct and formal approval of the cooperation processes.

Some customers do not abide by their requests for new products until the introduction process has been finalized. For instance, there are cases in which customers request new products through different programs, but on completion of the development process, or when they are asked to place firm orders to ensure financing of actual manufacture of a product, they reject the initial product, and the implementing enterprise, industrial central, or executing ministry remains burdened with the technical plan task. This situation naturally leads to uneconomical expenditures.

Because of the great diversity of products, special facilities cannot be organized for the development of experimental models and prototypes and their testing so as to create the conditions needed for earlier institution of mass production of the new product. When new products are manufactured in the same facilities used to turn out current production, in the event of bottlenecks priority is given to the current production, and particularly to production for export.

From the technical viewpoint difficulties are sometimes generated by the impossibility of creating all the new components or products with the existing facilities. In the case of the F.900 EC (DEC) drill rig, for example, which is designed for drilling at great depths (beyond 1,000 meters), control head equipment is needed whose size and pressures exceed the limit that can be reached by current methods and for which technical facilities have not been developed. Creation of the new products requires cooperation with the Bucharest Heavy Machinery Enterprise. Such cooperation was instituted in 1984 and is still in progress as regards provision of intermediate products of cast steel.

In view of the increasingly rigorous requirements set for petroleum equipment, all necessary measures have been established at our enterprise for eliminating all bottlenecks. At the same time, with the assistance of the industrial central and the ministry in this sector specific measures have been determined to make certain that both cooperating enterprises and suppliers of raw materials will meet all obligations toward our unit within the periods stipulated in the contracts. Measures have also been provided for strengthening cooperation with customers so that firm orders will be placed for various products.

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MODERNIZING TECHNOLOGIES, PRODUCTS IN ENTERPRISES

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[Discussion reported by V. Boescu and C. Barnea: "Updating and Modernizing Technologies and Products"]

[Text] This is the last installment of the discussion organized by REVISTA ECONOMICA, with the help of the RCP Prahova County Committee, on the topic of "Updating and Modernizing Technologies and Products."

The discussion was attended by: Vasile Nitu, deputy chairman of the Prahova County Council of Workers Control of Socioeconomic Activities; Ion Pantazi, section chief of the Cimpina Institute of Oil and Gas Research and Planning; Dumitru Goidea, scientific director at the Institute for Refinery Research and Technical Engineering; Elena Dumitrescu, head of the design workshop of the Dorobantul enterprise; Constantin Trestioreanu, chief engineer of the Heavy Ball Bearings Enterprise; Atanase Niculescu, director of the Institute for Oil Equipment Design and Research; Ioan Petrovoai, head of the technological planning workshop of the Victoria tire enterprise, Floresti; Gheorghe Tiu, chief engineer for manufacture preparation at the Sinaia Fine Mechanics Enterprise; Victor Lambrescu, technical director of the 1 May enterprise, Ploiesti; Gelu Jungu, engineer for manufacture preparation at the Plopeni Mechanical Enterprise.

Quality as the Result of Complex Actions

Gelu Jungu: "Due to its manufacturing structure, our enterprise is expected to introduce new elements in the industry and economy. Along this line, in view of the fact that the economy needs new products and replacements for spare parts that used to be imported from abroad, the technical plans of the enterprise have yearly featured a considerable volume of activities designed to modernize and take into production new products, which made up some 80 percent of all our research and design activities.

"One objective that is very important to us is to shorten the period required to prepare for manufacturing new products, which begins with the information and documentation phase, for which purpose our enterprise has established data banks. We have been able to shorten the period of preparations for gear wheel pumps and engines by about 2.5 years as compared to the specifications of

technical-economic studies by raising the degree of standardization of the parts and subassemblies manufactured and utilizing standard assembly and sealing elements. In addition to reducing the volume of labor required and shortening the period needed to draft the designs of the new products (by providing the designers with previously studied solutions, applying certain uniform design prescriptions, and adopting repeatedly utilized type elements), this has permitted us to substantially shorten the period of technological preparation and to employ group technologies, minimal designs for tools, devices, and controls, and standard tools, devices, and controls that eliminate the need for repeated designing and even individual manufacturing. Along this line I want to stress that the tool production is now over 85 percent standardized, that of controls over 75 percent throughout the enterprise, and that of certain products over 90 percent.

"Generally speaking, the main concern of our planning department is to modernize the products on our manufacturing program by redesigning them so as to attain technical performances on a par with similar products made in industrially developed countries that we take as models of reference. We frequently have to expand the range of production of a certain line of products in accordance with the requirements of domestic and foreign customers, something to which our enterprise has always been receptive. Thus, we have expanded the range of continuous feed u.p.a. [abbreviation not further expanded] by designing and putting into production the F110 and F118 standard sizes, have designed and begun manufacturing new families of variable pumps and hydropower engines with frontal setting, and a family of telescopic cylinders which, simultaneously with the modernization and standardization of the production range, has been complemented by new constructive standard size elements that are now in the process of being put into production. Such examples can be cited for our other products, too.

"When a product is redesigned we always aim at attaining, aside from high product performances, a lower material consumption and at ensuring that the products conform with type series and are, if possible, modular. Practically speaking, the great majority of our hydraulics products belong to type series, something that makes it possible to work out group technologies and to obtain a high degree of specialization. Thus, our type-series of gear wheel pumps is highly standardized and comprises a high degree of modularity. so that from a limited number of parts we can produce a very large number of type-size simple and double pumps.

"There is no doubt that the process of modernizing and updating products can and must be continuously improved. Speaking from our experience, I can cite a few guidelines that can contribute to improving this process:

--in the area of product design it can be useful to more carefully select the construction solutions of certain blueprints coming from research and design institutes, so as to ensure that they fit the production possibilities of the industry (thus precluding the need to redesign certain specifications and preempting delays in beginning production);

--in order to increase the efficient introduction of new products, they should be designed and put into production only on the basis of thorough studies of

the domestic and foreign markets, and the notice period for imports and for acquiring reference models should be shortened so as to shorten the preparations cycle;

--ensuring priority technical-material supplies in the case of new products, outside the framework of the legislation concerning the series production, for which provisions can be made well ahead of time;

--reserving a quota for new products in the calculation of the capacities required for the various lines of production;

--establishing a priority program for special steels for cutting and hot metal-working tools permitting the processing of materials that are difficult to cut and shape and that are being increasingly utilized."

Dumitru Goidea: "The research work carried out at our institute is increasingly focusing on putting new products into production. The Institute for Refinery Research and Technical Engineering has always been concerned with this type of work, but even more so in the past 3-4 years, when we made an in-depth analysis of all products imported in our area of activity. Currently, the institute is responsible for the putting into production 172 products that are still being imported and that are featured in nine priority programs; I want to note that in 1985 and in the first quarter of 1986 40 products have been taken into production, while the rest are at the research or customer testing phases. In order to continuously reduce the need for imports, our research is aimed at shortening the preparation period as much as possible. As a rule, the preparation period for manufacturing new products is between 3-4 months to 1-2 years, depending on the complexity of the respective technologies, the possibilities existing for implementing them on existing installations or the need to build new facilities, and on the organization of the entire preparation process.

"By designing new products we also aimed at reducing the size of the respective installations and raising the technical and functional parameters of the new products. For example, due to the improvement of [hidrofinare] catalysts and by solving other engineering aspects, the new installations for gasoline, oil, or Diesel oil [hidrofinare] can have a much smaller reaction block and recirculation system, which means less energy consumption. Similarly, the new and improved locomotive oils have made it possible to double the utilization (exchange) period and to increase the utilization period of motor vehicles by 30-40 percent. However, in this area we encountered a number of difficulties that had a direct impact on the length of the period of preparations and its efficiency: --the programs on putting new products into production sometimes do not list the direct customers but only the coordinating ministries, something that makes it more difficult to obtain the basic data required for the research; --the preparations programs do not always envisage precise tasks and deadlines for the customers whose obligation it is to test the products developed by the researchers and awaiting approval; --in some cases the customers delay placing their orders for approved products for which production lines are already ready, etc.

"Naturally, there are many possibilities for shortening the period of preparation for the manufacture of new products but, in our opinion, what is primarily needed is a closer link between researchers, designers, producers, and customers. Along this line, we believe that no product should be included in any preparation program without prior discussions between researchers and users, which should help establish a complete program featuring responsibilities for all the sides involved down to the actual manufacture of the product. I say this because there have been situations when our institute was given in its preparations program products that did not even belong to its area of activity, being of an anorganic nature (metal powders, graphite mixed with other substances, etc.). A discussion between the researchers and users would have precluded such a situation and thus shortened the period of production preparations for the respective specialized institute.

"Moreover, the contact with the user must be permanently maintained so that possible changes of circumstances or solutions can be communicated to the researcher. There have been situations when, after a new product was developed by the researcher, the customer announced that it was no longer needed, and so valuable time and resources that could have been used for other purposes, were wasted."

#### Specialized Production Sections and Units

Atanase Niculescu: "New products and products in the process of being put into production are very important for increasing the actual production of oil equipment. thus, in 1985 some 70 percent of the production was made up of updated and modernized products, of which 98 percent were achieved on the basis of our own design. This year the production is scheduled to increase by 25 percent, whereby most of the increase will consist of new products.

"In the achievement of new products an important element is to shorten the period of production preparations by intensifying the research and design activities through a better organization of the manufacture of prototypes in specialized enterprises, cooperation with other related units, and testing and approval by the customer, after which preparations can begin and the products can be put into mass production. Sometimes, however, this cycle is disrupted for multiple reasons, such as: delayed customer orders, lack of elements provided through cooperation, delayed prototype testing by the customer, etc. Along this line, the scientific organization of production and labor at the central enterprises is designed to ensure manufacture in specialized sections and units, for the purpose of both more fully utilizing the production capacities, and more efficiently implementing key technologies in the manufacture of the new products, in view of the increased volume of products earmarked for export.

"The research work devoted to achieving new products and technologies involves 11 institutes of scientific research and technical engineering specialized in various areas, seven university chairs, and four faculties having laboratories equipped with special test benches and research processing computers. The solutions for manufacturing new products are selected by analyzing the value of the utilization and functions of the products, their technical allocation being determined in accordance with the international state-of-the-art and in

relation to the best products of specialized oil equipment firms. We also pursue indepth value analyses of modular standard elements for a number of very sophisticated products such as drilling rigs and various aggregates, in line with the economic allocation of functions, material costs, and labor, and for other categories of lines, types, and sizes such as drilling pumps, drilling-extraction equipment and tools, etc.

"In connection with the process of putting new products into production I want to stress that during this process there are sometimes delays generated by the fact that the customer does not provide the relevant process technologies to show the technical requirements to be met by the oil equipment industry, while the related industrial enterprises do not deliver the necessary construction equipment and material on schedule and as needed. We are referring to certain rubber and plastic materials and elements that are to be provided through cooperation and that are necessary in order to deal with new exploitation temperatures of  $-45^{\circ}\text{Celsius}$ , high pressure of up to 1,400 bar, temperatures of up to  $+300^{\circ}\text{Celsius}$ , and corrosive media including  $\text{H}_2\text{S}$  and  $\text{CO}_2$ ."

#### A Potential That Must Be Fully Utilized

Vasile Nitu: "As it has actually emerged from our dicussion, the efforts to update and modernize technologies and products concern all the industrial units, and all the party bodies and organizations of Prahova county. In order to ensure that these activities proceed in an organized manner, specific plans and measures have been established for each enterprise and each year of the current 5-year plan, and special teams, made up of the best qualified specialists and working people, have been put in charge of this objective in each unit, while at the county level a central commission will periodically examine the fulfillment of the plan and will intervene wherever the situation is not satisfactory.

"In the first half of this year, 35 of the 47 county units surveyed have fulfilled and even exceeded the degree of technology and product updating planned (the Telejean and Brazi petrochemical combines, the Ploiesti Refinery, the Busteni paper plant, the 1 May and Dorobantul enterprises of Ploiesti, etc.). At the same time, during the 1 January-30 June period this year 66 new technologies were taken into production in enterprises, and the county plan was thus 98.5 percent fulfilled. Among the new technologies implemented in this period we cite: a technology for plating by fluxshielded arc welding (SAF procedure) with two low-penetration wire electrodes for anticorrosion protection; the hydraulic modernization of pipe-tubular plate connections; centrifugal casting of alloyed pig iron sleeves of double, 610 mm length; the recovery of torch gas in rubber installations, etc.

"Simultaneously with the efforts to implement and expand the use of new technologies, the specialists and managements of all enterprises have focused on putting new and updating products into production. As far as we are concerned, we group these products into three major categories: a) machines, equipment, apparatus, and installations; b) materials; c) consumer goods. Concerning the first category, 10 units have fulfilled and exceeded the plan for new products. Among the most significant such products we cite: hydraulic blowout preventers type DF 7 1/16X700; extraction pumps for abrasive-corrosive

and mixed media for long cylinders (6,000 mm); vibration dampers for drilling strings; radial-axial ball or roller-bearings of various sizes. Despite these achievements, we must nevertheless state that the provisions concerning the updating of technologies and products were not met at all the county enterprises. Naturally, this had a direct impact on both the activities and plan indexes of the respective enterprises and on the customer units, which did not receive the relevant products on schedule.

"The detailed analyses made at each enterprise and at county level have highlighted important untapped resources in this respect, beginning with the organization of the production processes and down to economic efficiency. At the same time, they have permitted to establish effective and specific measures for each unit, so that the existing delays can be recouped as soon as possible and the conditions can be ensured for fully implementing the provisions of the 1986 plan on putting new technologies into production.

"We are taking special measures in the extractive sectors (oil, gas, and coal), so that improved technologies can help raise labor productivity more rapidly and permit the level of extractions to ensure not only the fulfillment, but the overfulfillment of the plan tasks. As it emerged from our discussions, we plan to more intensively mobilize the specialists with a view to finding new solutions for increasing the degree of recovery of gas and oil from deposits. Naturally, we endeavor to speed up the process of product updating in the other sectors, too, particularly in that of machine building, by achieving competitive machines, installations, and equipment, capable of permitting more marked export growth.

"In all these activities we put special stress on capitalizing on our local technological creativity, efficiently utilizing raw material and energy resources, and reducing specific consumptions and production costs. The suggestions made at this discussion will be pursued with a view to putting them into practice as soon as possible; at the same time, we will further involve all the specialists of research and technical engineering institutes in this action, with a view to rapidly promoting new and advanced technologies and the process of product updating and modernizing, so that this year's and all the 5-year plan tasks incumbent on our county's units can be fulfilled and even exceeded."

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ECONOMY

ROMANIA

NEED FOR MORE COMPETITIVE, BETTER QUALITY EXPORT GOODS

Bucharest REVISTA ECONOMICA in Romanian No 24, 13 Jun 86 p 16

[Article by Dan Apostolescu and Melania Cojocaru: "The Providing of Competitiveness to New Products in the Phase of Conception and of Introduction Into the Plan"]

[Text] The achievement of positive balances of trade and payments, the complete elimination of the foreign debt, and the consolidation of the country's valuta reserve represent one of the major tasks of the eighth 5-year plan. As Comrade Nicolae Ceausescu, the secretary general of the party, stated in the report presented at the 13th congress, "Starting from the important role that economic exchanges and cooperation in production have for our homeland's economic and social development, it is necessary for us to take every step to secure a 41-45-percent increase in international exchanges. At the same time, we will have to act regarding the raising of the quality and competitiveness of Romanian products on the international market, regarding Romania's more and more active participation in the international division of labor--as an important factor in collaboration and peace in the world."

The materialization of these particularly significant objectives for developing the national economy on predominantly qualitative bases necessitates, as is stressed in the party documents, the growth of the competitiveness of Romanian products so that, by 1990, that is, by the end of the current 5-year period, about 95 percent of them will be at a world level and 2-5 percent will be over this level. This is a complex task that involves at the same time specialists in research and production, in the field of technological forecasts, and in the field of marketing.

This complexity has its origin in the real technical and economic processes themselves and can be seen on at least a few planes: the multiple-criterion character of the notion of competitiveness, which includes alike technical, economic, price, and other determinants; the notion's dynamism, determined by an internal processuality that changes the criteria of evaluation from one stage to another; and the difficulties in rigorously determining the levels of international competitiveness in view of the wide range of products subject to comparison and their different level of development.

From a practical viewpoint, within our system of managing the economy, the providing of a high level of competitiveness has two aspects with a decisive character. On the one hand, the shifting of the center of interest toward the area of research and design of new products (technologies), it being known that the biggest reserves for improving the technical and economic performances are concentrated in this phase. On the other hand, the problem of integrating such elements of a qualitative nature into the plan structures--on a research and design level and, later, on a production and sales level--is posed. In this context, the devising of a method to determine and substantiate the competitiveness of products takes on a special significance. We will refer below to some achievements made on this plane at the Automation Research and Design Institute (IPA).

The raising of the technical and qualitative level of products and of their competitive level has represented and still represents the major objective of the entire activity of the above-mentioned institute. In this regard, suitable and concrete measures for improvement, established through in-house regulatory acts, have been initiated, by means of which the aim is to provide, right from introduction into the research plan, products with a competitive technical and economic level on the foreign market, along with devising a set of measures to promote for exportation the products achieved. In the following, we will give examples of the way in which the first aspect--the competitiveness of products--is being provided.

In the preparation of the proposals for the technical research plan, at least three similar peak products on the foreign market (Western or Eastern), for which the technical documentation is secured and the selling price is determined, are established for each new product. On the basis of these elements, the project chief works out the new product's structure and the price proposal, correlated with the rate of return approved for the respective group of products, on which advice is given in the institute's scientific and technical council. The decisive factor for evaluating the competitiveness of the product introduced into the plan is, consequently, the performance/cost ratio, compared with the best similar products existing on a world level, at which it is estimated that the new product will be achieved.

As a methodological principle, one observes that the performance/cost variant permits a suitable correlation of two indicators expressing competitiveness, especially as these indicators have a complex structure. In order to prevent the comparison of products introduced into the plan only with foreign products already found on the market, for which both the technical performances and the price practiced by the supplier are known, certain changes of a methodological nature, meant to position the Romanian product in competitive terms on the move, were made, a chief condition being to provide a performance/cost ratio above one with respect to products found on the world market.

The checking of the way in which the competitive technical and economic performances, set during the advisement on the topic, are provided is done throughout the development of the new product, in the phases stipulated in the contract, that is, experimental model, prototype design, prototype approval, working documentation, and zero series. In practice, a comparison of the

performances by stages with the best foreign product known is made on standard forms, from which a performance coefficient and a price coefficient result, the product's performance/cost ratio in comparison with the foreign product, which, as we said, must be above one, is determined with the help of these coefficients, and the proposal for the foreign price that can be obtained under conditions of competitiveness, while complying with the rate of return approved for the respective group of products, is determined.

In the case in which the result is not satisfactory from the viewpoint of the performance/cost ratio--a level below one or noncompliance with the approved rate of return--several variants are taken into calculation. Thus, it is possible to opt for changing the positions listed in the research plan in favor of other, more favorable ones. In any case, however, such a decision is preceded by an extensive action of redesigning the respective product either for the purpose of improving the technical performances or on the plane of reducing the material costs or labor expenditures, with the resumption of the analysis for complying with the predetermined values. In this context, the attendant costs and the possible extension of the design and production time are evaluated. (However, there are also certain exceptions to this comparative analysis, such as one-of-a-kind products made to order in conformity with the technical characteristics expressly requested by the customer.)

It is important to stress the fact that this evaluation does not have a static character. A number of dynamic scenarios that permit the measurement of the level of competitiveness (on the basis of the above-mentioned ratio), when the product designed in the institute and made by the specialized enterprise is put on the foreign market, are prepared on the basis of technological and marketing forecasts. A synthesis of the comparative analyses brings out the fact that over 60 percent of the IPA products devised last year have performances above the world level, they being achieved with lower costs.

Concrete results are illustrated by competitive products in demand on the world market, of which we mention: equipment with adjustable drives devised by the IPA and made by the IET, exported to the USSR; automatic testing equipment in the THETAROM family, which is exported to the GDR, the People's Republic of China, and the Polish People's Republic; ROMECOB equipment, exported to the People's Republic of China; an electrohydraulic and static-excitation regulator, exported to Columbia and Turkey; modems in the TELEROM family, exported to the CSSR and the GDR; an ECAROM process computer, exported to the People's Republic of China; and so on.

We feel that the method of analysis of the performance/cost ratio applied at the institute can also represent a useful instrument for the workers in the foreign trade enterprises, permitting the foreign price to be evaluated correctly and to be supported on the obtaining of the export permit and in the talks with the foreign client.

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ECONOMY

ROMANIA

USE OF COMPUTER TECHNOLOGY THROUGHOUT ECONOMY

Bucharest REVISTA ECONOMICA in Romanian No 24, 13 Jun 86 pp 10-11

[Article by Dr Nicolae Badea-Dinca and Dumitru Tibuleac: "Wide Access to the Achievements of Science and Technology Through Data Processing: Computer-Aided Research and Design"]

[Text] New qualitative elements of intensive economic development, basic vectors of the new scientific and technical revolution, computer technology and data processing are tending to become a common factor in all fields of economic and social life. They have already raised the country's scientific and economic potential and are more and more in evidence in the creative processes, in industry, agriculture, transportation, communications, construction, etc., in the processes of execution and decisionmaking, in medicine, education, and culture. Receiving continual, growing attention in the last 20 years, computer technology and data processing now stand in the center of the policy on Romanian science and technology in the process of automation, electronicization, robotization, and cybernation of the national economy.

The modernization of the processes of management, conception, and execution in the economy does not constitute an end in itself and cannot be treated as a phenomenon independent of the economic and technical criteria. The leaps made in developing our national economy raise scientific, technological, and organizational problems of the most complex kind, which already can no longer be solved without the help of information. The providing of technical and economic competitiveness to products, the raising of labor productivity, the rational utilization of resources, and the systematic raising of efficiency depend decisively on the process of creativity, on the rate of introduction of scientific and technical results into production. These objectives raise new requirements and high responsibilities both for the specialists in the field of scientific research and technological design, in general, and for those who work in computer technology and data processing, in particular, in carrying out the programs for automation, electronicization, and robotization of production and other economic and social activities. The achievement of new means of computer technology and the development of basic and application programs for medium-sized to big computers, minicomputers, microcomputers, and personal computers are subordinate to the requirements of increasing the labor productivity and raising the quality in all branches of the national economy.

Starting from the provisions of the Program for Scientific Research, Technological Development, and Introduction of Technical Progress in the 1986-1990 Period, the Special Program for Computer-Aided Research and Design, under the coordination of the National Council for Science and Technology, was drawn up. The program is oriented toward solving the general problems of modernizing the activities of research and design, with the specific objectives being tackled within the framework of subprograms according to branches of the economy. The objectives in the Complex Program for the Scientific and Technical Progress of the CEMA Member Countries up to the Year 2000 and, in general, the most important directions approached on a world level are also reflected in the program, bringing into being the prospect of our participation in a number of actions of multilateral and bilateral international cooperation in this field. The implementation of the provisions of the Program for Computer-Aided Research and Design will permit the introduction of advanced methods, of advanced means of data processing into the activity of creation for the progressive automation and cybernation of this activity. Modern industry is now characterized by the dynamic and integrated development of the activities of computer-aided research, design, and manufacture in flexible production systems.

Computer-aided research and design combine both methods, techniques, knowledge, and means specific to the field and ones specific to data processing (programming, data-description, and dialogue languages, data-management systems and programs, and equipment). The combining of them allows a research and design team or just one specialist to define their problems, to perform complex calculations, to have access through a computer terminal to data for documentation--norms, consumptions, standards, model technologies and designs, etc.--to automate the execution of designs, to obtain technological and construction variants according to economic and technical criteria, and to prepare the working and testing documentation. As one can see, through the programs conceived by mixed teams of designers and computer experts, the computer is taking over a number of operations that otherwise require a big consumption of time, raising manyfold man's information capacity (potential) and providing optimum conditions for the manifestation of his creative intelligence.

At bottom, in the phase of conceiving new products, services, and technologies the main resource processed is information. The innovation brought by data processing lies precisely in the quantitative and qualitative dimensions previously unknown in the activities of design and research. Data processing strongly affects the time needed for documentation, for specification of solutions, and for experiments, tests, and corrections. The designs can be changed or modified easily with the help of computer equipment and data-processing programs. Many of their elements can be tested individually or in conjunction with others. Once the design is validated, the computer automatically gives the information needed--technological and construction information--for the technical preparation, the scheduling, and the putting of it into production.

In very many cases, computer-aided design systems are integrated with production systems aided or run by means of computer technology. It has become possible for the paper tapes for control of machine tools to be generated by computer as part of the design process or by means of direct data links--within

computer networks--and for the sharing of information to be achieved between pieces of computer equipment that coordinate different phases of the manufacturing process.

A peak field, the field of computer-aided research and design includes both the new directions of evolution of data-processing technology as such and the general fields of utilization. Referring to data-processing technology, the following are in view:

The development of specific equipment with high productivity and reliability, black-white and color graphics terminals, and other specific input and output devices (graphics tablet, drawing tables, and graphics printer);

Libraries of programs for scientific and technical modeling, simulation, and calculations;

Programming and man-computer-dialogue languages with friendly working facilities (graphics interface and natural-language elements);

Systems for description, storage, and modification of two-dimensional and three-dimensional designs;

Systems for management of data bases, knowledge bases, and data banks resulting from the research process;

Systems for processing experimental data based on elements of artificial intelligence;

Means of interconnecting computers into general and local networks.

The provisions promoted by the program that refer to the problems of standardization, typification, and functional modularization, flexibility, and operation in an interactive mode are extremely important for securing the generalization of current and future achievements in the economy. These characteristics and the high productivity of computers and data-processing programs generate a massive reduction of the work phases in the research-production cycle. This is possible as a result of increasing the labor productivity--from a few tens of percent to tens of times--of ceasing to make prototypes or experimental models, and of reducing the material and human expenditures involved in the operations of testing and experimentation. Many of the program products of general interest for computer-aided research and design were devised by the Scientific Research and Technological Engineering Institute for Computer Technology and Data Processing, as general designer or specialized designer, by the units of the Central Institute of Physics, and by the Institute for Typified Constructions, the Institute for Energy Studies and Designs, the Energy Research and Design Institute, The Bucharest Polytechnic Institute, the Universities of Bucharest and Iasi, and the Cluj-Napoca, Timisoara, Ploiesti, and Constanta Territorial Computer Centers and others.

The main directions approached in the program products for computer-aided research and design are structural engineering, the designing of investment

objectives, the devising of technologies and the simulation of technological lines, the processing of experimental data, computer graphics, libraries of scientific and technical programs, and interactive computer-aided research and design systems. These directions reflect, in general, the priorities known on a world level and, at the same time, are of general interest. In this framework, program products for mini- and microcomputers were made for the calculation of structures, the automation of the execution of technical designs, the programming of machine tools with numerical controls, the representation of three-dimensional bodies on a display or a drawing table, the description, storage, and modification of designs through graphics dialogue, the computer-aided analysis and design of automatic systems, the processing of experimental data, and libraries of scientific and technical programs and specialized languages for computer-aided research and design. A number of these products were generalized rapidly, there being an average of 15-20 users per product; due to their modular conception, they were able to be incorporated into many turnkey applications and systems (scientific and technical libraries, nuclei for two-dimensional and three-dimensional graphics, etc.).

Computer-aided research and design are thus becoming imperative necessities for industry, construction, agriculture, transportation, and the sphere of services.

Here are just a few examples: In the aeronautical industry, the labor productivity in computer-aided design for aircraft shows the following increases over the productivity level obtained with traditional methods: 4-fold for the achievement of the support for machine tools with numerical controls, 11-fold for the representation of structure, 17-fold for the specification and analysis of modifications, and 65-fold for the creation of wiring diagrams. In the industry for mechanical, electromechanical, electric, and electronic components, the interactive achievement and testing of products leads to big material savings and to productivity increases lying between 5- and 20-fold. In many situations, as is the case of high-density printed circuits--the achievement of connection diagrams with traditional means becomes, in practice, extremely difficult or even impossible to do. In the fields of industrial and civil construction and of architecture, functions such as the following are achieved: structural engineering, the designing of construction installations and of technologies for achieving them, the static and dynamic simulation of structural elements, the preparation of economic documentation, and so on. In cartography, the reduction or total elimination of manual drawing occurs, the automatic checking of precision and quality is provided, and the possibility of standardization and modification increases.

In all fields, the structure of the design process is changing. The respective procedures of decisionmaking and execution, the operations of selection and combining of standard elements and specific ones, the retrieval of information, and the execution of designs are done automatically.

In the 1986-1990 period, the research efforts will be oriented toward the following fields: scientific and technical modeling, simulation, and calculations, designing of investments, processing of experimental data, graphics systems, image processing, data- and knowledge-base management systems,

assistance and man-computer-dialogue systems, data-base management systems for information and documentation, and instruments for achieving expert systems for computer-aided research and design. The development of complex applications and systems for computer-aided technological and construction design and the transition to the achievement of integrated computer-aided design and manufacturing systems, intended mainly for flexible automation of production (of one-of-a-kind items and small and medium-sized series), will be pursued. The packages of programs achieved and approved along the line of the program's provisions will be generalized by means of pilot points that will operate in research and higher-education units, in territorial computer centers, etc.

On the basis of the measures provided by the National Program for Computer-Aided Research and Design, the Scientific Research and Technological Engineering Institute for Computer Technology and Data Processing [ICSITTCI] is acting to establish in the future an economic setup of program products for computer-aided research and design, so that, in accordance with the world practice, the programs stored on large-scale integrated electronic circuits or on magnetic media may be sold like any merchandise, receiving a price on the basis of their approval. The products of the Romanian computer-technology industry, based on national research and, in particular, on the achievements of the specialized institute, the ICSITTCI, already permit data processing of a computer-aided research and design type to be tackled on a wide scale in the economy. A special effort of research and design in computer technology will be made in the next 5-year period, according to the program's provisions, in order to provide a modern material base for this dynamic and exacting field of data processing. The program attaches a particular importance to the process of retraining the personnel in research and to adapting higher education to the needs imposed by the new techniques of computer-aided research and design.

The system of computer-aided research and design is now being promoted on a wider and wider scale on a national level, there being drawn into this action scientific research and technological engineering units in representative branches of the economy, with the final goal pursued being that of securing--through the penetration of the new peak technologies and of data processing over a wide front in all sectors--the strong growth of labor productivity and quality in the activity of research and design and the raising of the level of quality and competitiveness of production. The level of quality and the competitiveness of products on a world level also depend more and more on the use of computer technology and data processing both in the phase of conception and in that of execution. In the main industrial branches in the developed countries, about 80 percent of the savings in raw materials, supplies, energy, and labor resources are attained as early as the phase of designing the products and as a result of the heavy utilization of means of computer assistance. This explains why the developed countries devote to computer-aided design between 20-25 percent of the total expenditures for computer equipment.

The field of computer-aided design is experiencing continually growing progress, outstripping by 15-20 percent the average growth in computer technology; up to 30 percent of the programming capacity is devoted to devising systems and programs for computer-aided design. This entails, of course, that the material base for computer-aided research and design be provided and be

utilized as efficiently as possible and that the researchers and designers be given suitable training or advanced training.

The implementation of the provisions of the National Program for Computer-Aided Research and Design is contributing to the progress of Romanian science and technology, to the affirmation of these fields as an important factor in the economic and social development of our homeland.

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ECONOMY

ROMANIA

### IMPORTANCE OF AUTO INSURANCE

Bucharest ERA SOCIALISTA in Romanian No 11, 10 Jun 86 pp 42-44

Article by Luci Melonescu: "The Prudent and Thrifty Spirit of the Man of Modern Society"

Text Life in today's world is becoming more and more complicated, and its pace is very swift. And the risks to which the individual and his property are exposed increase accordingly unless timely precautions are taken guaranteeing that misfortunes will not occur or that they will be promptly remedied in case they do. Therefore the spirit of precaution and accordingly of thrift must be cultivated in each and every member of society and in communities as well.

ADAS State Insurance Administration is the Romanian institution specializing in insurance, and it organizes economic units' and citizens' mutual aid. The main objectives of the workers in this important institution are to serve the interests of the national economy and the public, to improve the existing forms of insurance, and to settle all the legitimate claims of the insured promptly.

In Romania the number of car owners keeps increasing as the public's material and cultural welfare improves. The statistics show that in 1965 there was an average of 1.2 cars per 1,000 inhabitants. The number increased to 13.7 in 1975 and reached 42 in 1985. Now one out of eight households has a privately owned car. This development logically intensified highway traffic and of course increased the risks of accidents.

Therefore it became necessary to create effective means of covering the consequences of the risks confronting the driver, and insurance is one of those means.

If car owners who are not covered by insurance for civil auto liability are to be compensated for damage to their own cars, they must take out an optional policy for auto damage (casco) with the ADAS, which protects them in the following cases: (a) The car was damaged because it was hit in operation by another motor vehicle, by any other kind of vehicle, or by any mobile or immobile bodies outside of the insured car. (b) The car was damaged because it skidded, overturned etc. while in operation or because of failure of any of its parts. (c) The car was damaged in operation or while standing by an unidentified motor vehicle. (d) The car was damaged in operation or while standing because it was struck

either by vehicles not included in insurance by virtue of the law on civil auto liability or by pedestrians, or by bodies falling on it. (e) The car was damaged by fire or by burning of the building in which it was garaged, by an explosion whether or not followed by a fire and including explosions of the fuel tank or the compressed air tank, by lightning whether or not followed by fire, or by natural disasters that can cause damage to a car directly or indirectly through collapse of a roof on the car, etc. (f) Other cases included in the policy.

Optional insurance for auto damage (casco) also includes costs of bringing the car to the repair shop nearest the site of the accident that can make the repairs, or to the nearest place for sheltering the car, if it cannot be moved under its own power. Also included are damage to the car caused by measures taken at the time of the insured event in order to salvage the car or the structure where it is housed, as well as outlays made to limit the damage if they were necessitated by damage caused for reasons included in the policy.

The insurance premiums vary with the cylinder capacities of the cars.

The insured also have the following benefits: (a) payment of annual premiums differentiated according as the policy is taken out or renewed directly with the ADAS unit and according to the uninterrupted duration of the policy if no compensations were received or are owed for the previous years on the basis of the concluded contracts, and (b) repair of insured cars in repair shops with no obligation to pay them in advance because the amount of the repairs estimate is paid directly to the respective shop.

The policy for auto damage (casco) is the most complete coverage for motorists. In describing some of the situations that may arise as well as the terms on which optional insurance for auto damage (casco) is taken out, it should be noted that the latter is essential to any car owner even when there is insurance by virtue of the law on civil auto liability. If optional insurance for auto damage (casco) has been taken out, insurance for damage to a car driven by a person other than the insured or a relative of his may be taken out in addition, and 25 percent of the specified premium for insurance for auto damage (casco) is paid.

To meet the most varied requirements for insurance against unforeseen situations that may arise while cars are in use, or to cover some categories of damage alone, with corresponding payment of premiums, car owners may also take out other kinds of auto insurance as for example:

- Insurance of cars solely for damage caused by traffic accidents, the premium for which is 80 percent of the specified sum for insurance for auto damage (casco);

- Accident insurance for drivers of cars and other persons in the cars, which is taken out whether or not a policy for auto damage (casco) has been taken out and covers, within the limit of the permissible number of passengers, the effects of accidents to persons in the cars. The premiums for this insurance are set according to the amount of the insured sums for each person.

The optional policies that one person may take out also include mixed life insurance, enabling the insured to save in a planned fashion a certain sum of money that he will receive when the policy expires. This insurance is also a financial aid to the person who takes it out or to his family in case of unforeseen misfortunes.

To meet some of the public's requirements, mixed life insurance also takes other forms arranged by extending protection to more persons, by supplementing the insured sum in case of certain categories of covered events, etc.

Mixed life insurance for families permits including all family members from 5 to 65 years of age, any of whom may collect the insured sum provided according to the covered event that occurred.

Mixed life and supplementary accident insurance is a form whereby the insured sum set for the consequences of accidents is increased over the sum specified for the other events included in this policy.

Mixed life insurance policies have a number of characteristics in common, such as the fact that they are available to persons from 16 to 65 years of age, they can be taken out for periods of 5 to 15 years, and the premiums vary with the age of the insured, the period for which he is insured, and the size of the insured sum. Upon expiration of policies on which premiums have been paid for the entire period specified in the policy, the insured sums are received along with a compensation of 10 percent, and the policies are included in the monthly amortization lotteries, 1,000 lei out of the insured sum being awarded for each combination of letters drawn in the lottery. If the insured has suffered an accident incapacitating him permanently (either immediately or within 1 year of the accident), he receives the insured sum entered in the policy in case of total incapacity or a portion of it corresponding to the degree of incapacity determined in case of partial incapacity. After these sums are received the policy continues for the sum entered in the policy and for the benefits flowing from it, the subsequent sums being granted independently of those for permanent incapacity.

For the duration of the policy the insured can change the provisions in the policy concerning the beneficiary, the amount of the sum and the expiration date. He can also choose another form of insurance with adjustment of the premium as the case may be. The policy can be reinstated by payment of the unpaid premiums in a lump sum or by installments, or by extending the expiration date of the policy if payments of the premiums were interrupted for various reasons. But it is necessary to pay the premiums by the specified due dates in order to keep benefiting by the advantages of mixed life insurance policies.

Those interested may also contract with the ADAS for other forms of life insurance such as insurance for savings and permanent incapacity from accidents, fixed-term insurance, insurance with compensation for a limited time, and travel insurance (with single premium or payment of premiums for a limited time).

In the years of socialist construction in Romania and especially in the last two decades, the public's supply of consumer durables increased considerably along with the increase in workers' incomes. In 1985 there was an average of 272 radio sets per 1,000 inhabitants compared with 123.9 in 1965. In the same period

the number of TV sets per 1,000 inhabitants rose from 28.8 to 222, that of refrigerators from 21.3 to 187, that of washing machines from 22.9 to 134, etc.

Computed for 100 households, 85 percent of households now have radio sets, nearly 70 percent have TV sets, 58 percent have refrigerators, two out of five have washing machines, etc.

Of course every family that has such possessions as well as others like them has an interest in insurance against misfortunes and the assurance that it will be compensated in case of any kind of trouble.

In order to restore property damaged by unforeseen events that may occur in households, citizens can take out optional comprehensive insurance for households. It is a combined policy providing in the same contract for household goods, some accidents occurring in the home, etc.

This policy covers such household goods as furniture and other household items, clothing, rugs, radio and TV sets, sewing machines, refrigerators, stoves of any kind, agricultural, vineyard, orchard and animal products, fuels, construction materials for household use, etc. For 20 percent of the insured sum, insurable goods taken outside the home are also covered by the policy.

The ADAS compensates for damage to insured property caused by such risks as, for example, fires, lightning, explosions, torrential rains, floods, hail, storms, landslides, accidental damage to installations for gas, water, drainage or heating, etc.

The same contract covers the following persons for the consequences of accidents sustained in the home of the insured: the insured, his or her spouse, and their parents and children if they live and keep house regularly with the insured. This policy covers accidents caused by such events as fires, lightning, explosions, blows, falls, landslides, burns etc.

The insurance premium depends on the amount of the insured sum requested by the insured for his household goods.

Accident insurance is one of the optional policies that can be taken out by one person. It can be contracted for by persons 16 years of age or more regardless of occupation or place of work. It covers such unforeseen events as blows, falls, landslides, explosions, lightning, electric shocks, burns, drowning, frostbite, accidents caused by operation or use of machines, instruments or tools, accidents caused by operation of transport means or by accidents happening to them, etc.

Accident insurance takes the following forms: (A) Accident insurance for total fixed sums of 19,000 lei is taken out for periods of 3 months or multiples thereof up to 2 years. One, two or three policies for fixed sums can be taken out for the same period. (B) Accident insurance for negotiated sums is taken out for periods of 1 to 5 years.

In both of these forms the premiums depend on the amount of the sum for which the applicant wishes to be insured as well as the duration of the contract.

(C) Family accident insurance covers, in addition to the insured principal, his or her spouse and their children aged from 5 to 16 years for total sums of 15,000 lei per person for a period of 3 months.

Note that accident insurance policies for fixed or negotiated sums and family insurance policies also cover damage to domestic and household goods for an insured sum of 5,000 lei per policy.

(D) "Tourist" insurance is recommended for taking trips. It is taken out for a period of 1 month and covers both accidents of the insured and damage to his domestic and household goods left at home or taken on the trip.

The insured sums are between 15,000 and 40,000 lei for bodily injuries sustained by the insured (depending on the nature of the accident) and 20,000 lei for damage to domestic and household goods.

The ADAS plays a particular part in all the institutions and socioeconomic activities in Romania. Through all that it does this institution brings a number of advantages to both the public and the national economy. Its workers are determined to improve their work and perform in exemplary fashion, with a high sense of responsibility and obligation, and accordingly contribute to the entire Romanian people's progress in building the fully developed socialist society.

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ECONOMY

ROMANIA

### USE OF SUBSTITUTES TO REDUCE METAL CONSUMPTION

Bucharest REVISTA ECONOMICA in Romanian No 24, 13 Jun 86 pp 6-7

[Article by Olga Mihaescu, Institute of Industrial Economics, and Ilie Nastase, Ministry of the Machine Building Industry: "Decisive Actions and Measures for Developing the Base of Energy and Raw Materials: the Use of Substitutes--an Efficient Solution To Reduce Metal Consumption"]

[Text] The rapid development of the machine-building industry is clearly increasing the pressure on metallic mineral resources by raising the demand for metal products. Under these conditions, broad efforts to reduce this pressure are being made throughout the world, it being possible to group into the following major fields the actions that are intended:

The reduction of specific consumptions in the production processes by reducing the dimensions or mass of parts without affecting their performances, by increasing the service life of subassemblies, by reducing the amount of scrap that can be partially recoverable through recycling, and so on;

The partial replacement of scarce raw materials, for which purpose the aim is to provide the uses and functions of parts by achieving new combinations of elements and materials (Footnote \*) (The analyses and tests made on a world level have proved that a successive decline in performances is not caused by using an alloy poorer in alloying elements. In addition, a reduction in the consumption of materials is obtained by concentrating them in the space that must fulfill a certain function. Thus, through the selective utilization of coatings on a substratum of cheap material, functions like resistance to corrosion or to wear can be fulfilled with a lower consumption of various scarce materials and, at the same time, with a much lower total cost.);

The replacement of critical or costly materials, as follows: pure precious metals by alloys, a problem that is posed especially in electronics and electrical engineering, where big amounts of such metals are consumed, for which, on a world level, solutions for substitution have been found by using substitute alloys or metals based on tin, lead and tin, palladium, and so on; metals by ceramic materials (widespread in nature and presupposing a relatively low consumption of energy for preparation, ceramic materials can replace metals in the fields of high temperatures and corrosive, erosive, or wearing media); and

metals by technopolymers, which, due to their characteristics, offer specific possibilities of substitution.

Dwelling on the third big field--the utilization of replacements and substitutes in the production processes--let us mention that the machine-building industry is a big consumer of metal in various forms (rolled metal, pipe, sections, plate, wire, etc.) and in various stages of processing, it being possible to replace some of them with composite materials for various uses. (Footnote \*\*) (Some 90 percent of the composite materials utilized on an industrial scale are those with an organic matrix (polymers reinforced with various fibers), there being some particular, limited applications for those with a metallic or ceramic matrix.) Composite materials are recommended both due to their own characteristics (low weight, resistance to corrosion, suitable mechanical properties, energy content, and so on) and due to their versatility in utilization, connected with the material's flexible constitution (anisotropy on demand) and with the possibilities that are offered by the technologies for making the parts.

The use of substitutes for steel in machine building has a definite positive influence on the economic effectiveness of the processes of making and using the products due to the savings of materials that are obtained in the processes of producing and working the respective material.

In the Romanian machine-building industry, the concerns existing in this field have led to the obtaining of notable results. Thus, through the metallizing technologies devised by the Bucharest ICTCM [Technological Research Institute for Machine Building] for a piston-sleeve assembly in a crude-oil-extraction pump and implemented at the Cimpina IM, an average rise of 122 days in pump durability was obtained; the material consumptions generated by making the cages utilized in the galvanizing installations were cut from 6.5 kg per piece to 0.9 kg per piece by replacing metal with domestically produced plastic.

To reduce the weight of automobiles, the Brasov ICSITA, in collaboration with the producing units, initiated special programs regarding the reduction of metal consumption through technological and construction redesigning, the use of steel with superior characteristics (dual-phase steel) and aluminum to a greater extent, and the raising of the degree of utilization of plastic (the utilization of plastic in making automobiles will be expanded year by year, from 2 components--fan and filter housing--in 1985 to 15 main components in 1990, with a metal savings of 1,666 tons per year). In the field of truck, dump-truck, and utility-vehicle production, big cuts are being obtained in the consumption of molybdenum, copper, chrome-nickel, etc. by introducing a large number of new technologies in support of the process of replacing scarce materials and in the technological consumption of electric power by replacing the surface treatments.

There is constant concern for reducing the consumption of nonferrous materials in the units that make bearings and assembly parts. Thus, at the bearing enterprises in Birlad and Ploiesti, they have begun to replace the technology for making the cages from brass (where the operating conditions allow this) by making them from plate through drawing; in this way, the achievement of a

savings of 78 tons of brass this year and 117 tons in 1990 is foreseen. In addition, in the same field, the expansion of the use of plastic instead of metal to make bearing cages is being pursued, so that the metal savings may rise to about 30 tons this year and to 116 tons in 1990.

The orientations and tasks mapped out by the documents of the 13th RCP Congress and by the higher party leadership with regard to rationalizing the consumption of resources in the national economy and raising the degree of utilization of them and the world experience and our own experience in the direction of expanding the use of substitute materials have led to the outlining of directions of action, at the level of the machine-building industry, to be applied in stages.

Thus, for the short-term prospect, the priority and special programs existing in the MICM [Ministry of the Machine Building Industry] provide for the wide-scale expansion of the application of surface-coating technologies, of the "enhancement" of materials with heat or thermochemical treatments, etc., along with measures to raise the degree of utilization of "classic" materials through:

The construction redesigning of products (in the sense both of reconsidering the construction solutions and of optimizing the choice of the materials and semiproducts) and the improvement of the design methods used;

Technological redesigning, especially with regard to: expanding the application of precision technologies in the casting, molding, or sinter-molding of materials, generalizing the use of the computer to divide and cut plates, expanding the utilization of heat treatments, widely applying anticorrosive and antiwear protective coatings, applying unconventional processing technologies in as many fields as possible, and others;

The recycling and reconditioning of used materials, the expansion of the recovery of the fragments resulting from the dividing processes, the outlining and application of suitable technologies for reintroducing used components and subassemblies into the production circuit, etc.;

The improvement of the organization of production, aimed particularly at expanding the centralized division of plates, expanding the management of shavings, properly organizing the records, sorting, and storage of the scrap from the production processes, etc., and the improvement of the technical-material supply by requesting and furnishing the materials at negative tolerances and at fixed and multiple lengths.

In a more remote perspective, the concern for applying a broad policy of economizing on materials and utilizing new, substitute materials will be intensified, in accordance with the general strategic objectives of the national economy. To this end, action will be taken:

To expand the area of utilization of high-performance materials, used at present in aeronautics: composite materials based on glass fibers in a matrix of plastic or composite materials with a metallic matrix, layered (sandwich)

materials, or honeycomb-type spatial structures (the transfer is to be directed mainly toward the automobile industry and toward ships);

To develop research of our own in research units of the MICM and to support it through programs on a national level coordinated by the CNST [National Council for Science and Technology] and through international collaboration--participation in the CEMA Complex Program for Scientific and Technical Collaboration;

To collaborate with the branches supplying materials to achieve new types of materials as substitutes for conventional ones, such as: high-strength low-alloy steel--brand-name and dual-phase steel--plates and sections requested by the automobile industry that permit a 15-20-percent cut in the weight used, various technopolymers, which can be used as such or in hybrid constructions (spatial-expanded structures, composite materials, etc.), and so on.

In addition, it is considered necessary to study more thoroughly the advisability of setting up specialized nuclei in the scientific research and technological engineering institutes and the economic units in the MICM and a co-ordinating nucleus that would concretize the national economic strategy and policy for the use and utilization of materials for the machine-building industry. These nuclei would have to have as objectives of the activity performed: the intensification and the raising of the efficiency of the utilization of materials in machine building; the expansion of the utilization of substitutes under conditions of maximizing the economic efficiency of the production activity; the centralization and guidance of the policy on utilization of materials and substitutes through the materials section of the state and departmental technical plan; the coordination of research and experiments on the utilization of new, substitute materials in the branch; the coordination of the transfer of high-performance materials to other fields of machine building and to horizontal industry; the creation of a system for quantitative and qualitative management of the utilization of materials by computer and the implementation of it in units of the MICM; the providing of the interface with the branches supplying materials in order to more rapidly introduce the new materials approved; the guidance of the research on the technical setting of rates of material consumption, the typification and standardization of materials at the level of the branch (branch standards) and of the economic units (in-house standards), and the advisement on the standards devised for materials; and the technical and economic substantiation of the measures for replacement of materials.

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POLITICS

HUNGARY

FIRST OF A SERIES ON '56: Rakosi's Power Monopoly

Budapest MAGYARORSZAG in Hungarian 13 Jul 86 p 21

[Article by Ferenc Varnai: "Success Goes to the Head" This article is first of a series. Future articles will be published in subsequent issues of this JPRS series.]

[Text] Almost three decades have passed since the outbreak of the "counterrevolution" on October 23, 1956. Many have analyzed its causes since then. Perhaps the most in-depth analysis had been provided by the Hungarian Socialist Workers Party [MSZMP], when it collectively designated a multiplicity of catalysts. These include: (1) the policies of the clique lead by Rakosi, which dogmatically disregarded Hungarian features and peculiar national traits; (2) the treachery of the revisionist Imre Nagy and his associates who surrendered the national interest as well as the idea that power resides with the workers; (3) the re-emergence of, and aim for restoration by certain members of social classes that have been deprived of both political and economic power following the "liberation"; and (4) the active support [of the counterrevolution] by [the forces] of international imperialism. The series that begins today will introduce some of the personalities who carried an especially heavy burden of responsibility.

July, 1956

At the age of 79, Matyas Rakosi died on February 5, 1971, in the county hospital of the city of Gorky. His political death, however, may be traced back to the summer of 1956, 15 years before he actually died. It so happened that at its July 18-21 session, the Central Board of the Hungarian Workers Party [MDP] relieved him of his duties as the party's first secretary, and revoked his membership in the Party's Political Committee. The official reason given by the Central Board at the time pertained basically to Rakosi's "health", even though the Board made reference to charges concerning personal cult and violations of law. Public revelation by the MSZMP of the true reasons took place in December, 1956. And in June, 1962 he was ousted from the Party on grounds that "he is especially responsible for instilling the practice of personal cult, for the immeasurable damage he caused to the people, the Party and to the cause of socialism, and for the ideological trials."

It was not an easy decision: Rakosi had participated in the workers' movement since the age of 18, after all. And when he returned from Russian captivity after World War I, he was a founding member of the Communist Workers Party [KMP], and became its Commercial Commissar as well as an activists performing certain important military functions during the era of the Hungarian Soviet Republic. Following the defeat of the Hungarian Soviet Republic, he emigrated to Vienna and later to the Soviet Union. He performed illegal assignments here at home beginning in 1924, resulting in his arrest a year later. His entire conduct projected the defense of communist ideals during the Horthy era trials in 1925, and in 1934 he gained world-wide respect. His fame increased during the 16 years he had spent in jail. He was freed from Horthy's jail on October 30, 1940, and was handed over to Soviet authorities. He was exchanged for flags captured by the Russians in 1848, which were then returned to Hungary.

He arrived in Debrecen on January 30, 1945. At that time both the emigre communists, and communists residing in Hungary agreed that he should be the head of the Hungarian Communist Party [MKP]. At that point, and for the previous several months, the MKP had been engaged in the lawful process of organizing within the already "liberated" territories. In those days it was not only Rakosi's past that earned him respect: his politics were sober and measured, he was personable as well as highly cultured and multilingual. His popularity rapidly grew in spite of his stocky, bald-headed stature, somewhat slow speech and his mannerisms.

Appropriate MKP politics and close ties to the masses soon produced tangible results. During the years 1947 and 1948, democratic transformation has gained speed and reactionaries were driven back. The left-wing parties acquired a majority of the votes, and it was possible to begin the nationalization of banks, large enterprises and schools. On the international scale too, the nation's orientation has turned in the direction of progress and socialism.

#### Things that were mistakes, others that were crimes

The intoxication that followed success provides a partial clue to the understanding of Rakosi's change in politics and conduct. The changes could be sensed especially in three areas: (1) the neglect, exclusion and failure to appreciate those allies who helped achieve the results, and for whose support there appeared to be a continued need; (2) the impatient acceleration of development; and (3) the continued search for enemies in cases where the enemy had already acquiesced into the changed situation.

Rakosi has failed to consider the unification of the two workers' parties as a manifestation of the unification of the working class. Instead he used the occasion to deprecate the historic concept of social democracy. In this vein, he characterized the two wings of the Social Democratic Party as having a right wing that is composed of police informants, and a left wing that covers

up the right wing's treachery. Among the peasentry, rather than showing patience as previously announced, the demand for the establishment of farm cooperatives at a forceably rapid pace virtually exploded overnight. An identical spirit was manifested with respect to forced industrialization in areas where the needed foundations, i.e. domestic raw material supplies, did not exist. Rather than broadening alliances, all these activities discouraged confidence and encouraged division among forces that struggled for the establishment of a new society.

International developments too pointed in this direction. In the aftermath of World War II, the western powers began to liquidate their alliance with the Soviet Union. Proclamation of the Truman Doctrine, the ousting of French and Italian communists from their respective governments, the disregard of the mutual obligations with respect to Germany, the confrontations of the Cold War, and the outbreak of the Korean War all raised the specter of a new world war.

The Office of Public Information June, 1948 condemnation of the Yugoslavian Communist Party on grounds that it overemphasized the peculiarities of the various avenues that lead to socialism, also played an important role. By then Poland, Bulgaria, Yugoslavia and Czechoslovakia were viewed as accomplished people's democracies, while Hungary was considered a country progressing in the direction of becoming a people's democracy. Accordingly, the Rakosi clique found it appropriate to speed up the process. They limited the functioning of coalition parties to sheer formalities and began to wither the [Patriotic] People's Front. In this endeavour Rakosi relied upon the false doctrine proclaimed by Stalin, according to which class struggle becomes continually strained in the progress of building socialism.

Rakosi's mistaken policies could have been corrected. But during the Spring of 1949 the mistakes turned into unforgivable sins. They arrested, and initiated an ideological trial against Laszlo Rajk, then Foreign Minister and a member of the Political Committee of the MDP, as well as against several other communists. Rakosi delivered his memorable September, 1949 talk about the Rajk case: "only after many sleepless nights did the action-plan take shape." A majority of the victims of lawlessness and tyranny came from the Party's 'Old Guard,' while Rakosi's person projected a cult of mythical infallibility, that of a "beloved leader" and that of "Stalin's best Hungarian disciple."

In an April, 1957 statement to Unita, Janos Kadar described the roots of this problem as follows: "Power presents two big trials for communists. The first trial takes place when confronting the enemy. In this trial communists risk their lives and miraculously hold their own. This includes Rakosi. The second trial occurs when communists acquire power. Some, who passed the first trial in an exemplary manner have failed the second trial. They began to feel that they knew everything and began to isolate themselves from the masses for which they have fought for so long.

## He had to fall

Stalin's death in March, 1953 became the starting point in the Soviet Union for a departure from the cult that has developed concerning his person. The Soviet Communist Party [SZKP] then recommended to the parties of the people's democracies--including the MDP-- that they conduct a critical self-examination of their policies. In mid-June, 1953 a delegation of the Hungarian party travelled to Moscow. Following these conferences, a resolution of the Central Board of the MDP created an opportunity for renewal in Hungary also. This resolution was sharply critical of the overly rapid process of industrialization, the neglect of agriculture and the falling standard of living, as well as of violations of law, of arbitrariness, and of the clique structure of the leadership. Rakosi's responsibility [for these negative events] was emphasized by the Central Board's critique. The Central Board then went on to chart a new economic policy, to increase the collective nature of leadership, to separate Party leadership from the Minister Presidency (as Imre Nagy became Prime Minister), and to exclude Mihaly Farkas and Jozsef Revai.

Rakosi appeared to have exercised self-criticism, in reality, however, he began to manoeuvre. In the spring of 1955 he succeeded in condemning the Party's changed policies as a right-wing stray. At the same time, his rival, Imre Nagy was replaced. The surviving victims of the ideological trials have since been released, and Rakosi failed in once again making them disappear. He tried, however, to shift the related burden of responsibility upon former chief of the State Security Police [AVH], Gabor Peter and his associates.

In early 1956, the 20th Congress of the SZKP made Rakosi's situation completely untenable. It is a fact though that upon its return from the 20th Congress, at its March 12-13 session the Central Board tried to present the situation as if the Congress had proven Rakosi and his policies to be correct. ("During the 20th Congress we have verified that the chief policies of our Party are in every respect correct.")

Janos Kadar, then first secretary of the Pest County party committee had a different view. Having served time in prison as a result of the ideological trials, and having been released from prison in 1954, Kadar was an invited guest at the March 12-13 leadership conference, even though he was not a member of the Central Board. We quote from his remarks: "We lack analytical depth, we fail to draw conclusions, we lack details for and the execution of our actions. Our Party cannot afford the luxury of declaring once in June, 1953 that here a mistake is being made, and then repeating the same statement again and again..."

At the time the Central Board demanded that Rakosi account for the absence of rehabilitative action, he blamed "inexperience" as being the reason for delays. In the spring of 1956 he stated that the Rajk case had been based on provocations by Berija (the then highest ranking leader of the Soviet State Security Police -- Ed.) and by Gabor Peter. Then, in a speech delivered at a meeting of active party workers, he was forced to admit that "I too should be blamed for the occurrence of severe violations of law."

Rakosi, who together with his clique had monopolized power, fell from power in July, 1956. To be sure, however, his chief supporter, Erno Gero took his place.

POLITICS

HUNGARY

'56 SERIES CONTINUES: NAGY SAID TO SIDE WITH REACTIONARIES

Gero's Role

Budapest MAGYARORSZAG in Hungarian 20 Jul 86 p 21

[Excerpts] Even though, according to various memoirs, Gero disliked Rakosi--perhaps because he considered him a rival or because of their different styles--Gero was the number one spokesman for the cult that was formed around Rakosi. He first referred to Rakosi as leader of the country and elevated him to the level of an idol when he announced, ". . . when we say Rakosi, we mean the Hungarian people. And when we say the Hungarian people, we mean Rakosi."

He lived a puritan, almost ascetic life. But he was fanatical and impatient; he exuded extreme over-confidence, and his coldness created a wall around him. His inclination toward dictatorial, bureaucratic leadership and mistrust increasingly manifested itself. Even those who respected him were afraid of him.

In June 1956 the central administrative body, which had decided on various changes in the leadership, allowed Gero to remain a member of the political committee; moreover, as the First Deputy Prime Minister, he also became the Minister of Internal Affairs--even though he received severe criticism for the aberrations in economic policy.

It Cast a Shadow on Him

It is no wonder that when in July 1956 he became the first secretary of the central party leadership--although he established priorities in terms of a two-front struggle--he proved to be unsuitable for liberating the Hungarian Workers' Party [MDP] from the Rakosi legacy and leading the party out of crisis. The illegalities as well as political and economic mistakes, of which he had been a part, cast a shadow on him. In characteristic fashion, even in his concluding remarks made at the four-day session of the central leadership he spoke like this: "Comrade Rakosi continues to remain a member of the Central Administrative Body and the Presidential Council, and he remains a deputy in the National Assembly, etc. This goes without saying." But the party's membership and the majority of the public considered this anything but natural.

Erno Gero's radio address was aired on October 23, 1956, at a critical time. At that time, the very fact that he, with his dry, preachy style, was the one who spoke in the name of the party, further sharpened the already dangerous situation. In his speech he revealed the counterrevolutionary nature of the armed struggle, but he lumped the enemy together with the opposition and those who expressed dissatisfaction. It is, however, untrue that the speech by Gero was the cause for the outbreak of the armed uprising. Those who wanted to present the armed attack of the counterrevolutionary forces as a "spontaneous, un-premeditated movement" spread the rumor that Gero first spoke on the radio on October 23 at 6 o'clock in the evening and that this speech was re-broadcast at 7 o'clock and gave rise to "popular anger." If it had indeed happened this way, then the protest would have developed into an armed uprising only after the speech had been delivered. Actually, the speech was delivered at 8 o'clock in the evening, when they were already shooting at the radio building. Nevertheless, his trite phrases were repulsive. And by not answering those concrete questions which were brought up by the youths who were dissatisfied with the mistakes and who were seeking to improve socialism, Gero, willy-nilly, played into the hands of the Imre Nagy revisionist group.

#### Nagy and the "Reactionaries"

Budapest MAGYARORSZAG in Hungarian 27 Jul 86 pp 20-21

[Text] The road to 1958, when Imre Nagy was condemned to death and executed in Budapest, was long and instructive.

Imre Nagy, who returned at the beginning of the liberation from a good decade and a half of exile in the Soviet Union, at the age of 48, spoke with a pleasant Transdanubian dialect and wore pince-nez, and who for many years was a member of the party's political committee, filled various ministerial posts between 1948 and 1952, including Minister of Agriculture, Minister of Internal Affairs, Minister of the Food Industry, Minister of Collecting Surplus (Agricultural) Produce and Livestock, and Deputy Prime Minister. After the liberation, he was the first one to head the agricultural ministry, and it was at that time that he received the name "father of the land reform."

#### What Was Left Out

As a consequence of the basic social changes which occurred in the country in 1947-48, the party leadership designated as its chief goal the start of the building of socialism. In the beginning Imre Nagy outlined in his "Comments Written on the Guiding Principles for the Economic Policy of the Party" a valid opinion which warned against rashness in the socialist reorganization of agriculture. But he also expressed unsound views. In 1949, in his "Elaboration" he did not criticize the fact that the party leadership sought to enroll the peasantry into cooperatives through forced economic policy measures, but rather he questioned the necessity for socialist reorganization and recommended the preservation of small-peasant land ownership. At that time the central leadership of the Hungarian Workers' Party not only rejected certain incorrect views that Nagy expressed but labeled his opinion as completely right-wing and opportunistic and removed him from the political committee.

A few documents reflecting his point of view can be found in Imre Nagy's speeches and writings published in 1954 ("Egy évtized" ["One Decade"], Szikra Publishing House), when he was already Prime Minister. The articles written during the course of the debate were, however, omitted from among these documents, or else he corrected them later, before the publication of the book, and did not publish his own self-criticism. At the September 1949 session of the central administrative body he did, nevertheless, state the following: "I retract "The Elaboration," which contains my opportunistic views regarding the most important basic questions of our agricultural policy . . . The decisive question around which my errors are grouped and which forms the essence of my right-wing opportunistic deviation is the direction and means of development in Hungarian agriculture . . . The errors I made in evaluating the people's democracy had a decisive role in this . . . I labeled the national economy of the people's democracy as state capitalism. But if what is being developed in our country is state capitalism, then the prospects for development in any branch of our economy, even in agriculture, cannot be socialism, but rather capitalism . . . I considered it necessary to take a stand against those who exaggerated the "kulak" threat, although this is not the primary threat which must be overcome, but rather the existence of "kulaks" themselves."

#### After the Schism

But it was not just a question of Nagy revising the theoretical basis of his views. At the beginning of 1951, during the second congress of the Hungarian Workers' Party [MDP], he was put back on the political committee because he accepted, without any reservation, the responsibility for increasing twofold the targets of the five-year-plan. He wrote the following lines in the July 1, 1951 issue of the SZABAD NEP: "The collection of surplus (agricultural) produce and livestock is not a matter of necessity but is an integral part of developing socialist planned economy . . . , delivery of surplus agricultural products to the state is justified, and anyone who wants to delay delivery directly from the threshing machine will not fare well." And in 1952, he was the one, as Minister of Collecting Surplus (Agricultural) Produce and Livestock, who had the peasants' attics swept clean of the last grain. This behavior cast a shadow on his honesty, even when he justly criticized the leftist line of the Rakosi group.

In June 1953 the leadership of the Hungarian Workers' Party [MDP] subjected the sectarian mistakes of the earlier period to sharp criticism and announced a program for the sweeping rectification of the mistakes. On the advice of the central leadership, Imre Nagy became president of the Council of Ministers. His role in the leadership of the party and of the country increased greatly. Two factors cast doubts on the correctness of this decision: already when he was Minister of Agriculture, and later when he was Minister of Internal Affairs, it was proven that he was not sufficiently forceful or capable as an organizer. Even though his ideas on various questions had been incorrect, in his new function he was glorified, and it seemed that all of his earlier views were entirely correct.

Soon he followed the necessary changes by manifestations which distorted the approved program in the opposite direction. In his first speech before the National Assembly, Nagy overemphasized the protection of private farms, the

possibility of withdrawal from the co-ops, which encouraged a general attack on the cooperatives. With regard to the policy of industrialization, he only criticized, without taking a stand on the appropriate industrialization policy to be followed. At the congress of the Patriotic People's Front he voiced an idea which excessively magnified the role of the People's Front but remained silent on the role of the Party and encouraged nationalist forces. Irresolute and pliable, Imre Nagy also tolerated Erno Gero, who had a large part in making the mistakes, becoming Minister of Internal Affairs in his government, and Mihaly Farkas, who had overwhelming responsibility for illegalities committed earlier, being one of his major supporters, soon afterwards being once again elected secretary of the central committee, on Nagy's recommendation.

During the sharp debate and long wrangling which occurred in the leadership in March 1955, Rakosi's point of view once again came out on top, and the central leadership condemned Imre Nagy on a one-sided sectarian basis. On March 28, Nagy resigned his post as Prime Minister and began to play a double game. On May 4 he wrote a letter to the leadership of the party: "Although they are unusually harsh, I concur with the measures taken against me because of my mistakes, which have been justifiably criticized according to party standards in the resolutions of the central leadership." He promised to "exercise intensive self-criticism according to party standards;" Instead, he began to promote factionalism.

#### To Acquire the Leadership

During the second half of 1955 and at the beginning of 1956, he, together with those who shared his ideas, prepared studies in which his earlier erroneous ideas were re-kindled. He developed them further and sought to organize them. In writings that were smuggled to the West, but which also exist in manuscript form (in studies entitled "Morality and Ethics" and "The Five Basic Principles of International Relations"), he set as his goal, among other things, altering the foreign policy orientation of the party and the state. Already at that time he espoused the view that the country must withdraw from the Warsaw Pact and must assume neutrality.

Instead of solid criticism of Imre Nagy's ideas, Rakosi sought to end the matter with additional administrative measures. On December 3, 1953 the Central Control Commission of the Hungarian Workers' Party [MDP] expelled Imre Nagy from the party.

The resolution of the seventh congress of the MSZMP in December 1959 stated, "Because of the unprincipled struggle the sectarian leadership and the revisionist group conducted against each other, the will of the party membership, which demanded a correct policy, could not be realized. The revisionist faction in its attack initiated within the party relied on various external, anti-party forces and sought alliance with reactionary forces."

After the twentieth congress of the CPSU, since the leadership of the Hungarian Workers' Party [MDP] delayed the drawing of appropriate lessons, Imre Nagy also sought to make himself appear in the vanguard of those who rejuvenated the Hungarian communist party. For this purpose he utilized the prestige he had acquired at the time of the land reform.

After a period of confusion, a change in the policy of the party finally took place during the July 18-21, 1956 session of the central leadership. Rakosi was dismissed, and the leadership was augmented with individuals who consistently wanted to correct the mistakes. This situation also made it possible to clear up the matter pertaining to Imre Nagy. In the middle of July representatives of the central administrative body conferred with Imre Nagy. In their report they wrote, "At the outset, he objected to the idea that he had consciously assembled around himself certain elements, but then later he admitted that because of his bitterness and personal resentment he had not been selective in choosing his conversation partners . . . He promised to alter his behavior . . . To get rid of his ties with anti-party elements and those who do not meet party standards."

#### Martial Law and Mobilization

However, his group felt that their time had come. They wanted Imre Nagy to return to power, to no smaller post than the top leadership, as a moral and political victor. When representatives of the Politburo again conferred with Imre Nagy on August 14, 1956 he no longer wanted to hear about self-criticism. The situation in the country was already unusually tense. The Politburo gave in to mass pressure and in its resolution of October 13 revoked the expulsion of Imre Nagy from the party as an erroneous decision. The group's tactics succeeded. Their leader returned to the party essentially glorified.

One major demand of the protest on October 23, 1956 was that Imre Nagy should head the government. This was desired by many who were honest and loyal to the party and wanted an immediate and profound change in the leadership and policy of the party, but the right-wing, nationalist, counterrevolutionary elements also employed this slogan.

Most members of the central leadership knew that Imre Nagy and his cohorts were not faultless, but they assumed that he would help combat the trouble. The fact that the Imre Nagy group was on the side of the opposition emerged only gradually, during the course of the events.

Imre Nagy's chosen tactic was to retain the confidence of the communist masses--as long as possible--but also to serve those circles closely allied with the counterrevolution. All of this could be clearly deduced from his behavior with regard to the summoning of Soviet troops and the declaration of martial law.

From the start, he took part in the session of the central leadership assembled during the night of October 23 and accepted the decisions made there. He was there when they decided to summon Soviet troops, after news arrived about the treason of certain military and police commanding officers (for example, the commanding officer at the Bem Barracks turned over the weapons to the demonstrators). Nor did he comment on the summoning of Soviet troops during the dawn of the 24th, when it was agreed that--in order to strengthen the first secretary post of Erno Gero--Nagy would be named as a member of the Politburo and president of the Council of Ministers. (The Presidential Council named him Prime Minister at dawn on the 24th.) He also participated in the Politburo session which determined the military tasks:

". . . he repeatedly made comments and plainly stated that the counterrevolutionaries must be suppressed, martial law is needed, and it is necessary to turn to the Soviet Union." (Taken from the minutes of the June 1957 national meeting of the MSZMP.) In his speech on October 25, he himself said, "Our socialist order necessitated interference by Soviet troops in the struggles." On October 24, it was also Imre Nagy who signed the declaration of martial law which made counterrevolutionary acts--force used against authorities and the bearing of arms without a permit--a crime subject to the death penalty brought by a summary court. (Among his papers they found the document that the president of the Budapest Court had signed. On the back side of the paper there are several notes in Imre Nagy's own handwriting.)

All of this shocked his circle of friends and the counterrevolutionary groups. They put renewed pressure on him, and they had him state that others had acted in his name. And Imre Nagy drifted with the counterrevolutionary current. The following public statement was born: "In the name of history and fully conscious of our responsibility, we declare that Imre Nagy, president of the Council of Ministers, did not know about these two decisions." The French-language broadcast of the "Free Kossuth Radio" also added on the 28th that he had been named prime minister not on the 24th but two days later.

"They are exaggerating . . ."

He sought to obstruct the execution of the decisions. For example, on October 25, he arbitrarily suspended the curfew which would have been necessary in order to eliminate the armed counterrevolutionary forces. Over and over again he obstructed utilization of the military plans which had been prepared against the rebels. In the Ministry of Defense, for example--with the approval of Imre Nagy--they worked out a plan for the elimination of the Corvin Alley headquarters of the armed counterrevolutionary forces. On the morning of the 28th, minutes before the attack, he called off the operation on the pretext of "avoiding a bloodbath" and by threatening to resign. As for the position he took concerning the siege of the Budapest party committee building, we quote the testimony of Imre Nagy's former secretary, Mrs Jozsef Balogh: "At the time of the attack on the party building on Koztarsasag Square, I personally told Imre Nagy that they were shooting at the party headquarters. He said that I shouldn't create a panic . . . In the communique they reported shocking things about the atrocities. I took the information to Imre Nagy and asked him to read it. After asking him twice he looked at the material and shoved it aside saying that this was exaggeration."

On October 27, the new, the "first Imre Nagy-type cabinet" was formed. He reevaluated the counterrevolutionary events. He presented them as a "national uprising, a just national liberation struggle." In his radio broadcast on the 28th he stated this in the following way: "The government condemns those views according to which the current, enormous popular movement is a counterrevolution." Already on October 30th at 6 o'clock in the afternoon Imre Nagy received Jozsef Dudas, one of the leaders of the forces that had besieged the party headquarters on Koztarsasag Square. He immediately issued a statement in which he acknowledged them as "a revolutionary armed force," and he also officially put the state security forces in the hands of the Corvin Alley group and their cohorts.

Earlier, Imre Nagy had acted in the role of a representative of socialist legality. During these days, however, he acted in violation of the constitutional order and circumvented the Presidential Council and the national assembly. On November 1 he "withdrew" from the Warsaw Pact without legal authority. He did not act against the unconstitutional proliferation of various parties. He also did not say a single thing about the fact that the counterrevolutionaries had flung open the gates of the prisons, thereby freeing 12,000 prisoners, among whom were 9,500 common criminals.

#### The Real Tragedy

His treason was topped off when he turned to the UN, essentially to the Western powers, for help. During the dawn of November 4--when he already knew about the formation of the Worker-Peasant Revolutionary Government and about the fact that the struggle against the counterrevolution had been launched with the help of the Soviet Union--he made a statement on the radio: "Our troops are engaged in struggle. The government is in its place." He did not stay in his place at all, but rather went to the Yugoslav embassy. Zoltan Tildy, Imre Nagy's Secretary of State in his second and increasingly right-oriented cabinet, testified this way about those hours when he was deserted: ". . . he told me that we were going to the ground floor, because perhaps there would be some shooting . . . . I went back to my room for my coat . . . . Imre Nagy was nowhere to be found. I started to ask around about him . . . . An officer from the gate came in and told me that Nagy had gone to the Soviet embassy to negotiate . . . . I learned the following day that from the Parliament Imre Nagy had gone not to the Soviet embassy but directly to the embassy of another state. This was one of the greatest shocks I have ever experienced."

The real tragedy, however, was that the man who came to head the mass dissatisfaction with the Rakosi clique's policy laden with mistakes and crimes was one who--consciously or because of a character weakness--became a traitor to socialism and who was capable of bringing the Bela Kiraly's back to power.

Photo Caption: Prime Minister Imre Nagy delivers his exposé in 1953. His behavior cast doubt on the honesty of his position.



### Kiraly's Role

Budapest MAGYARORSZAG in Hungarian 3 Aug 86 p 21

[Excerpt] Imre Nagy appointed Kiraly to be the head of the Revolutionary Constabulary Committee and as the military commander of Budapest, at the rank of major general. The Revolutionary Constabulary Committee essentially placed under unified authority the armed forces and the "national guard" which had been formed out of the insurgent groups. Thereby military leadership passed into the hands of the counterrevolution.

His first act was to call on the current Minister of Defense, Pal Maleter, and to inform him that he would accept the appointment only if forty former Horthy-period generals and other high-ranking officers were reinstated into the army.

On November 1, upon the orders of Kiraly, they also created the so-called "Rehabilitation Council," among whose members were Kiraly himself and other former Horthy officers. In a few days the number of candidates exceeded 500, 300 of whom applied in writing. Simultaneously, the "Revolutionary Military Council" organized the removal of "unreliable" officers from the general staff.

#### With Exuberant Joy

As for the "national guard," it was basically composed of the armed groups which had taken over Corvin Alley, Prater Street, Baross Square, Harsfa Street, Vig Street, Almassy Square, Tompa Street, as well as the headquarters of the SZABAD NEP and had participated in carrying out the massacre at the Budapest party headquarters on Koztarsasag Square. Bela Kiraly, at a meeting of the command staff held in the Kilian Barracks, said, "In order to consolidate authority and insure victory for the revolution, it was necessary to occupy the party headquarters on Koztarsasag Square."

A large part of the more than 10,000 political and common criminals who had been released from the prisons organized into armed bands or joined already formed bands and constituted the reserves for the counterrevolutionaries. Kiraly, as the leader of the Revolutionary Constabulary Council, gave them hundreds of instructions and official coupons so that they could acquire as many weapons as possible. His secretary, Mrs Laszlo Balla, recalls this in the following way:

"Many former political convicts came to visit Bela Kiraly. A large part of them came still dressed in convict's garb, but some were already dressed in civilian clothes. However, they did not have coats and wore only short rough woolen jackets. Bela Kiraly told them that they should try to dress in something else as soon as possible, and he had many of them given police uniforms, which were issued by a major named Foldvari, who wore a police uniform and signed everything as Bela Kiraly's assistant. The former convicts acquired weapons and clothes . . . . In many cases I witnessed Bela Kiraly greeting these guys with exuberant joy and embracing them."

#### He Issued the Order

At the request of the Revolutionary Worker-Peasant Government, the Soviet troops began to extend their help in the elimination of the armed counterrevolutionary bands on November 4. One member of Kiraly's staff described the events of that day in the following manner:

At around 3 o'clock in the morning on November 4, Kiraly showed up at police headquarters, he summoned his trusted men, informed them of the start of Soviet troop activity. He then gave an order that his staff, under the escort of security details, should relocate to Janos Hill. He himself went to the American embassy. He returned at about eleven o'clock and sought to convince those present that they should withdraw the remaining armed units from Budapest, create detachments out of them, lengthen the duration of the struggle and organize a general popular uprising."

Kiraly--after issuing orders to resist to the last man--left for the West.

He was able to continue his service to the counterrevolution, which he spoke of as "the work so close to his heart," only in the United States. (We quote from the January 28, 1957 broadcast of Radio Free Europe: "Bela Kiraly testified before the US Senate's Committee on National Security, revealing military secrets pertaining to the Hungarian army, to the armed forces of the East European countries and those of the Soviet Union.") Under his leadership, the so-called Hungarian Freedom Fighters Federation was organized out of the combatants who had escaped to the West. He himself became an instructor at the United States Army Command and General Staff College with the rank of colonel.

#### Radio Free Europe's Role

Budapest MAGYARORSZAG in Hungarian 10 Aug 86 p 21

[Excerpt] Day in and day out, during the entire period of the counterrevolution, RFE came forth with inciting demands that then served as guiding principles for the counterrevolutionary forces.

On October 28 the New York headquarters of the Free Europe Committee gave new instructions to Munich about the demands which should be communicated to the "freedom fighters": immediate recall of the Soviet troops; leadership of the armed forces should be placed in the hands of an individual who had not been a member of any kind of communist leadership body; those who had any connection with the previous party leadership or government should be expelled from the government; preparation of a new constitution and government platform; withdrawal from the Warsaw Pact.

#### Empty Promises, Incitement

The executor, RFE, not only communicated these instructions but also emphatically warned against the "revolution" stopping where it had. It was not enough for RFE that the leadership of the party and the government had essentially gotten into the hands of the revisionists and that various bourgeois, even reactionary politicians had come to power.

"Colonel Bell," for example, said on October 29, "Imre Nagy and his colleagues want to repeat the Trojan horse episode slyly and in a contemporary form. There is a need for a cease-fire to act as a Trojan horse so that the Budapest government that is still in power at the moment can hold onto its position as long as it can."

"Colonel Bell" described as false and deceitful the communique issued by the Ministries of Defense and Internal Affairs, announcing the agreement reached with the armed insurgents who promised to turn their arms over to the Hungarian army, and he called upon the revolutionaries "not to lay down their arms to units of the Hungarian army or the police." "The revolution," the RFE commentator announced, "has succeeded only militarily; it is far from achieving its political goals." And he added, "If they lay down their arms that would be equivalent to prolonging the national misfortune . . . . The communique of the Minister of Defense is a smoke-screen, its only goal is to lead the victorious revolutions astray and to lose the glory which it achieved on the barricades . . . ."

#### The Script

On October 31 the microphones broadcast his words, "The communist leaders who had no business being in such positions, must leave the leadership of the Hungarian armed forces. Freedom Fighter brothers-in-arms! Demand for yourselves immediately the defense portfolio, the position of commander-in-chief and head of the general staff! He who has the weapons has the power! They still have Internal Affairs and they still have Defense! Don't rest, freedomfighters! Don't lay your guns down! . . . Withdraw from the Warsaw Pact!" He demanded "independence"--according to New York instructions and taste.

On the evening of November 4, fifteen hours after the decisive attack against the counterrevolution had been launched, RFE continued to make empty promises: "The fate of Hungary will be decided tonight at 2 o'clock, when the full session of the UN will discuss the American proposal. Before this time, that is before 2 a.m., they cannot send any military aid of any kind to Hungary."

The blood of Hungarians was cheap to them.

But the events did not follow the scenario produced by foreigners.

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POLITICS

HUNGARY

STUDY OF ASIAN, AFRICAN LANGUAGES EXPANDED

Budapest MAGYAR NEMZET in Hungarian 28 Aug 86 p 5

[Text] "He who does not know Arabic, should not study Arabic!" Nowadays the old saying of Debrecen origin is meaningless. Today's simple Hungarian cannot afford to indifferently ignore distant cultures and languages. The increasingly widening economic and cultural ties of our country, and the expanding concept of being educated make it increasingly necessary for us to familiarize ourselves with and also to learn eastern languages--among them, primarily the Arabic language mentioned in the proverb. The staff and instructors in the department dealing with Oriental Studies at the Lorand Eotvos University provide assistance in this regard by offering various courses to the public within the framework of the Eastern Languages College.

Assistant Professor Tamas Ivany, director of the college, says, "The Eastern Languages College has been operating for five years under the aegis of the Korosi Csoma Society of the Hungarian Academy of Sciences. Each year several hundred students sign up for advertised courses at the beginning, intermediate, and advanced levels. This year, in addition to the four literary languages (Biblical Hebrew, Sanskrit, Tibetan and classical Chinese), they announced instruction in ten spoken languages: Arabic, Swahili, modern Hebrew (Ivrit), Turkish, Persian, Hindi, Chinese, Korean, Vietnamese and Japanese language courses will be offered. Certain languages may also be taken on a correspondence basis.

What results can the students achieve?

"Our experiences have shown that the majority of the students are able to prepare for the basic language exam in one year, while in order to acquire an intermediate level of knowledge, three years of regular study are necessary. Our instructors assume responsibility for successful results. Upon special request, a higher level (interpreter) course can be offered. What is more, in order to familiarize them with the Arab dialects and customs that vary from country to country, we also offer special training in the vernacular languages and Islamic culture courses for Hungarian experts preparing to travel abroad.

Now that it has been operating for five years, what has been the response nationwide to the Eastern Languages College?

"When we first began to offer instruction through correspondence courses last year, we had no way of knowing whether there would be significant interest in eastern languages outside the capital city. Since then, however, there have been numerous registrants from the farthest corners of the country, and they are doing well. It is perhaps interesting that in response to our advertisement published in MAGYAR NEMZET, a woman of Hungarian origin living in Israel wrote to us, saying that she desires to learn Hebrew through a correspondence course from Budapest. . . ."

When will the courses begin?

This year, interested persons may register for the Eastern Languages College from September 1-12, in the afternoons from 3-6 o'clock, Monday through Friday, at the university's building number 46 in Izabella Street.

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POLITICS

HUNGARY

### IMPLICATIONS OF NEW EDUCATION LAW EXAMINED

Budapest NEPSZABADSAG in Hungarian 30 Aug 86 p 1

[Article by Laszlo Sarkadi: "In the New Academic Year"]

[Text] Everyone expects a lot from the new academic year, and this is understandable: as of September 1, the new education law will take effect. The National Assembly approved a development program for public education two years ago; the legal framework as well as the instructions for its execution have since been formulated. At the time, there were debates in professional circles concerning what had to be done with regard to development of public instruction; nobody doubted the need for this. A certain amount of dissatisfaction and especially impatience were voiced during those debates, the written documentation of which is maintained in the ministry and was utilized in the formulation of the law.

This healthy dissatisfaction and prodding impatience has historically been one of the more important moving forces in the development of Hungarian public education. On July 3, 1867 Jozsef Eotvos wrote a letter to Miksa Falk, editor of PESTER LLOYD, who was also a parliamentary deputy and a member of the Hungarian Academy of Sciences. The minister wrote the following lines pertaining to the necessity for a public education law: "When we consider our current situation and how much time is needed before we can see the result of the efforts we have made, then we must find very natural the impatience with which the matter of general education comes up at every opportunity." At that time, impatience was characteristic of the leading pedagogical experts, politicians and progressive reformers; today, this impatience is much more widespread. Occasionally it is voiced in much too sharp terms.

During the past decades, impatience and expectation have increased in Hungarian public opinion. The moving source behind this intensification is, first of all, the relative backwardness of public education, but dissatisfaction has also been keyed up by several not-so-well-considered actions which we have witnessed during the past decades. There have been frequent decrees or directives that pretended to be comprehensive. More often than not, the result was over-regulation and growth in the bureaucracy of public education.

One of the most important tasks of the law now taking effect is to make the regulations governing the life of the schools more unambiguous. About 800 decrees, regulations, and directives had to be eliminated, made more unambiguous, changed or augmented. It is no exaggeration to say that nearly the entire legal system pertaining to Hungarian public education had to be reorganized. For a long time various forums have complained about over-regulation of the school system, and the schools themselves have grievances. The problem never lay with the guiding principles, but rather with the formal, legal and bureaucratic obstacles that prevented people from applying them. At times, the best intention brought nothing more than a new--perhaps contradictory--regulation. The responsible independence of educational work could not develop in such a disorganized area.

The new law presents opportunities and encourages independence. It does just that: presents and liberates. It would be an illusion to expect anything more than this. We have already encountered such an illusion in conjunction with the new law. Dissatisfaction and impatience often veer off into opposite extremes. Neither the new, all-encompassing law, nor all the power of the government would be sufficient in themselves to renew the educational work of the schools, without the assistance of the schools themselves, and the initiative and effort of the teachers. The law can only offer opportunities and encouragement; it cannot accomplish the everyday tasks. This can also be derived from the history of Hungarian public education. As proof, we again quote several sentences from the above letter written by Eotvos: "In all of these urging calls I see only one mistake, and this is a very widespread conviction: even if the government directed all of its power and influence exclusively toward this, it could [scarcely] do all or most in the matter of public education. . . If there is a problem, for the solution of which all the power of the state is insufficient--it is general education. This is a task which only the people themselves can solve." Today we would conceptualize this by saying that the school can solve it--with society's help.

At this point, a question may justly arise in the reader: the law, in the spirit of which the academic year began, created the legal conditions for the modernization of educational work, but is this sufficient, don't we need something more than this in order to bring discernible results to this process, so that a discernible qualitative change takes place in the foreseeable future in the effectiveness of education? Let us try to answer frankly: the schools will operate according to the old norms during the new academic year. There will not be many more classrooms, neither will the depressing concern with regard to the shortage of teachers be solved in one year, the number of children in secondary schools will continue to grow, and employment of the untrained will remain unavoidable. This will be so, in spite of the fact that public education will receive greater financial support than previously. Its effect, however, will only be measurable in years to come.

Neither will enforcing the spirit of the law be easy. Greater independence also means greater responsibility, because the schools will have to decide questions which until now have been regulated by central directives. Even

educators will not be able to learn independence from one day to the next. That is why this year will be a kind of practice year, with more than a few problems and difficulties. There will be more people knocking on the principal's door. It might be better if the principal would not even wait for the knocks.

The planned change in the role of principals has already been a frequent topic of conversation in the teachers' lounges, and it will be even more so after September: instead of being appointed, the principal will be elected by means of a secret ballot. This has been already tried at several schools, and almost everywhere it has resulted in extensive debate. No wonder, since a centuries-old tradition must be changed. The principal who has been chosen through election has a huge advantage as compared to his predecessors: the confidence of the entire body will be behind him, but it is not certain that this internal confidence will be completely shared by the higher organs. In the best of cases, this confidence will exist; but we pity the school principal who will be appointed by his superiors only because the teaching body "insisted upon" this.

One cannot work without trust, and this trust must rest on two factors: the complete and well-meaning support of the higher authority, and the readiness of the colleagues directly involved to offer assistance. Let us not be pessimistic, but it is likely that there will be more labor-related conflicts. Greater responsibility will fall on labor relations boards, on the school party organizations and on the trade unions. The time of passive acknowledgment is quickly coming to an end; everybody must voice his opinion and everybody must be listened to. The chief associates of the principal will be the specialized work groups in the various subjects and the home-room teacher groups, and it would be good if the parents' group would also take its place alongside these in rank and substance. We have only a vague idea about the operation and utilization of the planned school councils. Experience will show whether these bodies will be viable and useful, or just another burden on the teachers. Even assuming the best, it will take a certain amount of time until everybody learns their tasks.

So far, we have spoken mostly about the problems of the new academic year. But it is better to view the future realistically than through rose-colored glasses. Hungarian educators are mature enough for this.

In addition to the above-mentioned many problems, however, hopefully there will be a lot of joy in our collective work. Without this hope, it would be difficult to make a start. Let us express the wish that the educators will fulfill their hopes and that their work will provide them with something that cannot be replaced by anything else, the physical and intellectual growth of their students.

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POLITICS

ROMANIA

PROPAGANDA WORK OF COUNTY IDEOLOGICAL UNITS REVIEWED

Bucharest SCINTEIA in Romanian 6 Jul 86 p 4

[Article by I. Erhan: "The Offices for Ideological and Politico-Educational Activities - An Optimum Framework for Improving Propaganda Work"]

[Text] The creation of a new, socialist awareness, a complex, long-term process involving the efforts of numerous educational factors whose actions are convergent and multidirectional, is being done within a vast organizational structure. Within this overall structure, an essential role is being played by the offices for ideological and politico-educational activity. In addition to the job of themselves carrying out broad revolutionary educational activities, these offices also have important responsibilities in the guidance and review of political-educational activities in improving the ways and means of influencing awareness.

The requirements formulated by comrade Nicolae Ceausescu in his important speeches at the 65th anniversary of the creation of the Romanian Communist Party and at the recent party and state fora concerning the ideological and political-educational activities carried out by party organs and organizations have been the subject of the discussion here involving several directors of county offices: Ioan Biris from Arad, Valentin Bodea from Brasov, Petrica Butuc from Vrancea and Ileana Paranici from Suceava.

The Meaning of a Qualitative Leap Forward: From the Forwarding of Political Information to the Achievement of Political Instruction and the Formation of Political Convictions and Culture

The starting point of our discussions was the emphasis made by comrade Nicolae Ceausescu at the recent plenary session of the RCP Central Committee with regards to achieving an intensification of ideological and political-educational activities "both in the party and in the ranks of the broad popular masses. In ideological activities and in party education we must begin with the need to increase the revolutionary spirit, communist awareness, self-sacrifice and the spirit of revolutionary struggle of each communist." From this perspective the essential and priority objectives for the offices' activities were drawn up.

Biris: Any evaluation of the offices' activities must begin with the purpose and the desired result. The actions of propaganda are justified and find their efficiency under the conditions of our society only if they are expressed in one major direction:

the creation of the new man with a developed socialist awareness. In this regard, the offices for ideological and political-educational activities have special tasks, growing from one stage to another. Thus, for example, in this cycle for organizing and carrying out political-ideological training the offices have the job of carrying out a differentiated activity, one specific for the political-educational groups and one for studying the RCP Statute, guiding and supporting activities of the groups in the mass and public organizations, and expressing a high exigency concerning the content of the activities conducted in political-ideological groups.

Thus, the offices must ensure at all levels that there is a good understanding of our party's policies and a detailed discussion and thorough mastery of the content of party documents and the principal theses and ideas of materialist-dialectic and historical philosophy, scientific socialism, Marxist political economics and the scientific organization and leadership of society.

Through all their activities, the offices must serve as powerful methodical centers for improving political-educational work at all levels and ensure not only the transmittal of political information, but also, above all, the achievement of education, political training and the creation of convictions and a political culture.

Bodea: Placing at the basis of political-ideological study the theoretical and political work of comrade Nicolae Ceausescu - the expression of the revolutionary concept, creative Marxism under the specific conditions of our country and the contemporary epoch -, our county office places at the center of our concerns during the current period the integration in all our thematic meetings and discussions of the ideas, theses and directives contained in the theoretical work of comrade Nicolae Ceausescu. In this work of vast content, we find expressed the revolutionary tactics of the party for carrying out the program of economic and social development in the new five year plan.

Similarly, we find broad openings towards the specific activities of the work collectives, defined with accent marks, priorities and exigencies, as well as in the directives formulated by the secretary general of the party. Here, then, is an especially fertile ground within the framework of activities for meeting the theoretical content of the themes stemming from the party's strategy with specific aspects for each place of work.

Working to broaden the horizon of scientific knowledge and to further the students' understanding of processes and phenomena in our society and the world, through all our activities we are trying to imprint a new way of thinking and living, in the sense of the full involvement of each worker to fulfill his tasks with the satisfaction that he has contributed - overcoming eventual difficulties and shortcomings - to the socialist prosperity of the country.

Keeping in mind the truth that theoretical reflections are concentrated in the practical provisions and measures initiated by the party, the pressing urgencies of production also require political-ideological training to reserve a broader area for the most passionate discussions and confrontations -

within the good meaning of our socialist democracy - to find the most appropriate ways, means, methods and solutions for implementing the decisions and tasks that have been established.

All this requires a vast organizational effort on the part of the county office and the party organs and organizations. As a result, we have worked and are continuing to work to involve the entire aktiv of approximately 110 members - contained in the work collectives - , as well as other activists and propagandists in the county, in the broad and complex work with the propagandists and in the activities to guide and review related to the preparation and carrying out of thematic meetings and discussions.

Butuc: In addition to what has already been said I would add that one of the principal requirements to which the offices for ideological and political-educational activities must respond during the current stage is the direct involvement in resolving problems that are raised by production and the development of the economic thinking of communists, young people and all the workers. In political-ideological training and in propaganda work in conferences and ideological discussions, working in close cooperation with the other forms of political education work, it is necessary to show efficient ways and means so that the objectives of improving the organization of production and labor, of applying the new economic-financial mechanism with superior results, of increasing labor productivity, of improving quality and the competitiveness of products, and of reducing consumption levels will be achieved at the established levels.

The offices must respond with greater effectiveness and efficiency to the requirements concerning the thorough understanding and mastery - by party cadres, communists and all the workers - of the treasure of creative and revolutionary thought of the secretary general of the party. At the same time, it is necessary to develop an offensive spirit against ideological and political influences foreign to our concept about the world and life and against anti-socialist propaganda having a tendentious and distorted view of the achievements in Romania, as presented by certain reactionary groups abroad.

Paranici: The party's ideological program - a true map for the free affirmation of man and his creativity - requires for the entire educational process directed towards building the new human model effectiveness, consistency, mobility, intolerance towards any retrograde manifestations, and firmness and trust in promoting the noble ideals of socialism. In a word, the office must be a powerful catalyst for the political education of the masses, one constantly based on current events, always "one the curve." Judging in the spirit of the recommendations of the secretary general of the party, the criterion for the exact evaluation of the efficiency of the office's activities can be none other than the manner in which it achieves the objectives of economic-social development. As long as there are shortcomings in the field of economic activities, there can be no talk of appropriate activities of good quality by the office in the political-educational field.

The Center of Gravity of Actions - In the Economic and Social Units

Erhan: What experiences have resulted from the activities of the office you head?

Butuc: The Vrancea County Office for Ideological and Political-Educational Activity has concentrated its work at the level of the economic units and work collectives in industry, agriculture, construction, transportation and other fields. Notable results have been obtained within the framework of the "Week of Ideological and Political-Educational Activities in the Unified Agro-Industrial Councils," where we conducted - practically in all the agricultural production cooperatives, the state agricultural enterprises, the agricultural machinery stations, the research and production stations in agriculture, on farms and in production brigades, in schools and in villages in the non-cooperativized regions - speeches, symposia, roundtables, question answering sessions, exchanges of experiences and practical demonstrations, with participation from the party aktiv, the workers in these units and other residents.

During the course of this year, groups composed of activists from the office and propagandists from the county party committee conducted an interdisciplinary study in economic units in the municipality on the problems of labor productivity, with the conclusions being used to carry out political work and, certainly, to establish certain measures for the purpose of improving activities in this area.

In cooperation with the county office for economic-social organization we forecast for this year the achievement of other actions concerning the organization and modernization of production processes for the purpose of spreading the experiences acquired in outstanding units - the Enterprise for Tools and Hydraulic Elements and the Enterprise for Ready-Made Clothes - both in Focsani Municipality.

Bodea: One of the provisions of the decision of the Central Committee Secretariat of the party refers to the so-called actions outside the thematic meetings, which must bring together the activities of the members of the groups and the courses in production and in social and spiritual affairs.

Certainly, the establishment of these actions involves the latitude of the party organization and its bureau. Such actions - of a greater content - were also initiated and directed, however, at the county level, working so that the lessons and educational conclusions stemming from them would be integrated, like those stemming from the work undertaken at the local level, in the discussions and in the conclusions of the thematic meetings. I am referring here to the especially sustained campaign to recoup the shortfalls from the first months of 1985 and to have the complete fulfillment of the tasks of the preceding five year plan and eliminate any shortcomings that appeared in fulfilling the provisions in the plan for the months this year. A broad echo awakened the events organized in honor of the 65th anniversary of the founding of the Romanian Communist Party and the 50th anniversary of the trial at Brasov of the young communists and antifascists, led by comrade Nicolae Ceausescu. In this regard I can mention those activities carried out under the generic of "The Economic Strategy of the Party in the New Stage of the Country's Development,

A Shining Revolutionary Creation of Comrade Nicolae Ceausescu," which has been presented in many enterprises on the themes: "The Powerful Development of the Forces of Production on the Basis of the Advances of the Technical-Scientific Revolution," "The Accentuation of the Role of Intensive Factors - A Fundamental Economic Option," "The Continuing Improvement of the Economic-Financial Mechanism, Worker Self-Management and Economic Self-Administration," "The Organization and Modernization of Production - An Action of Exceptional Significance for the Fulfillment of the Plan Tasks of the Eighth Five Year Plan," and "Each Enterprise - A Redoubt of the Powerful Affirmation of the Revolutionary Spirit." Other activities include: "Homage to the Party and Its Shining Leader, Comrade Nicolae Ceausescu" - as symposia conducted in enterprises - and "Political-Ideological Meetings" - organized at cultural centers and cultural houses and clubs with participation by certain groups of propagandists from the county party committee. I can also add the exchanges of experience on the subject: "Organization and Modernization of Production - A Patriotic, Revolutionary Task of Each Collective and Each Worker."

Paranici: Through the organizational system that has been instituted, the Suceava County Office has sustained concerns in the area of the political-ideological training of cadres within the aktiv and especially those entrusted with responsibilities in the process of economic-social management. The ideological discussions and the reporting sessions organized with certain categories of personnel, the methodical on-the-scene discussions, the meetings with persons in different fields of science and technology and the involvement of the party aktiv by fields in the examination of the state of affairs encountered in the county are merely several examples of the experiences that have proven valuable in understanding the realities and opportunities which we have, as well as in establishing systemic educational actions.

In a future issue of this newspaper we will publish part two of the discussion.

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SOCIOLOGY

GERMAN DEMOCRATIC REPUBLIC

SED SOCIAL SCIENCE RESEARCH PLAN EVALUATED

East Berlin EINHEIT in German Vol 41 No 8, Aug 86 (signed to press 14 Jul 86)  
pp 693-700

[Article by Prof Dr Hannes Hoernig, member of the SED Central Committee and head of the SED Central Committee Science Department, and Prof Dr Gregor Schirmer, deputy head of the SED Central Committee Science Department: "Results and Tasks of Research in the Social Sciences"]

[Text] On 18 June 1986, the SED CC Politburo confirmed 1986-1990 central research plan of Marxist-Leninist social sciences in the GDR. The plan is the fourth of its kind. It directs social scientists to the implementation of the fundamental resolutions adopted by the Eleventh SED Party Congress. In his concluding address Comrade Erich Honecker noted that these resolutions initiated a qualitatively new phase in the further organization of the developed socialist society.(1) It serves the ongoing realization of our party program in which the main tasks of the social sciences are effectively rooted for a lengthy period of time.

The Central Committee report given by Comrade Erich Honecker and the directive to the 5-year plan assign new and challenging tasks to the social sciences. The party congress materials offer enormous theoretical riches and a plethora of suggestions for productive scholarly work. They bear witness to our party's ability to creatively and successfully apply the Marxist-Leninist doctrine to the concrete conditions of our country and, at the same time, contribute to the further development of this doctrine. The economic strategy of the SED, formulated in the Central Committee report, represents an outstanding theoretical achievement. It is based on the theoretical generalization (by now ranging across three 5-year plan periods) of practical experiences in the organization of an intensively expanded type of reproduction. It marks a new stage in our economic development and represents the core of our social strategy.

By the practical tasks formulated with an eye on the year 2000 and their theoretical-ideological content, the Eleventh SED Party Congress offers a challenge to social scientists to make their unique contribution to the further all-round strengthening of the GDR and to the preservation of peace by profound analyses of social processes and well thought out proposals for their management and planning, by theoretically ambitious studies that advance

social practice and are couched in plain and persuasive language. The central research plan was elaborated under the leadership of the party by the social scientists themselves, their scientific councils and collectives. It draws all the necessary conclusions from the Eleventh SED Party Congress and establishes the principal orientations and concrete projects. Social scientists are now confronted with the vital task to appropriately and punctually fulfill the plan.

#### Favorable Results

As Comrade Erich Honecker emphasized at the Eleventh SED Party Congress that the central research plan may build upon the fulfillment of the 1981-1985 Plan. This provided valuable contributions to our party's theoretical efforts and its day-to-day policy.(2) Our country's social scientists were able on the basis of clear Marxist-Leninist attitudes to improve the quality and efficacy of their work.

Progressive notions of the developed socialist society, its laws and requirements were acquired and feasible proposals for the settlement of matured problems elaborated. The implementation and further development of the party's economic strategy represented the focus of our scholarly efforts. Notable contributions were made to the unity of economic and social policy, the organic links between all spheres of society, in particular the intimate interaction of production, science, education and culture. Also to the fore was research related to the struggle for peace and disarmament, and to the dispute with the policy and ideology of the most aggressive imperialist circles. The 1983 Karl Marx Year and the preparation of the Eleventh SED Party Congress stimulated an upswing in theoretical thought. The climax of intellectual life was the International Scientific Conference on "Karl Marx and Our Age--the Struggle for Peace and Social Progress," organized by the SED Central Committee, and the internationally celebrated speech by Comrade Erich Honecker as well as his concluding address to this conference.

Four hundred and sixty-two manuscripts of books and 491 research reports were submitted as well as 62 scholarly meetings held in fulfillment of the tasks directly set out in the central research plan. Evidently this is merely the lesser part of our research results. Far more work was done on the basis of the special research plans of scientific institutions, drawn up in accordance with central research plan orientations.

#### Forward Pointing Performances

It is not easy to choose among the wealth of research completed. However, it is surely warranted to indicate the performances that eminently embody the new and progressive in the social sciences in the past 5 years.

1. Many social sciences, among them philosophy, economics, sociology, political science and jurisprudence, even liberal arts and art history, resolutely and successfully turned their attention to the study of the motive forces of socialism--to some extent in interdisciplinary cooperation. The 1983 SED CC Social Science Conference added essential factors to this topic by Comrade Kurt Hager's address,(3) and so did the 1983 Conference of Economists

by Comrade Guenter Mittag's report, (4) the 1985 Political Science and Jurisprudence Conference by Comrade Egon Krenz' report, (5), the 1984 Sixth Philosophy Congress (6) and the 1985 Fourth Sociology Congress. (7)

Fundamental issues of our conception of society were more profoundly investigated from the aspect of the motive forces of socialism. They include the interaction between material and ideological conditions, between the economy, science, education and culture, the relationship between subjective factors and objective conditions, the connection between social, collective and individual interests. Extensive studies with theoretical generalizations and proposals for practical consequences were produced with regard to the factors involved in stable and dynamic economic growth. These studies focused on the problems of management, planning and economic accounting, that arise from intensively expanded reproduction, in particular the establishment and development of combines. Valuable contributions were submitted on the encouragement of the working people's performance behavior and the conduct of the party's social policy.

2. Social scientists have increasingly accepted the challenges arising from the qualitative renewal of the productive forces in the new phase of the scientific-technological revolution. We now have before us ample works that concretely and for practical purposes deal with the tasks involving the combination of the benefits of socialism and the scientific-technological revolution. This includes books, instruction materials and studies on economic, social and management questions regarding the more rapid introduction and comprehensive utilization of microelectronics, modern computer equipment, CAD/CAM equipment and automation, the links between science and the entire reproduction process as well as the intensive organization of processes in research and development, oriented to top level performances. Ideological aspects of scientific-technological advances were further elaborated and increasingly publicized. In the course of these activities, sound relationships arose between social scientists and managers, economists and engineers working in the economy as well as natural and engineering scientists.

3. The performance of our historians--the further elaboration of the scientific historical image of the working class and the conception of our Marxist-Leninist heritage--enriched the intellectual life of our country and was admired by friend and foe. The 1982 Seventh Congress of GDR Historians and the concluding address by Comrade Kurt Hager (8) represented a significant milestone. The broad development of our progressive and revolutionary traditions as well as the sophisticated and sovereign treatment of the entire legacy largely contributed to the reinforcement of the socialist historical and national consciousness of GDR citizens.

The four volumes of German history represent the most comprehensive and integrated description of the German people's history from its beginnings until 1971. Many books, articles, lectures and movies persuasively illustrate the fact that the establishment and development of the GDR is deeply rooted in German history as a whole and indeed represents its climax. Outstanding in this context are the latest studies on the history of the SED and the GDR, on the 100th anniversary of Karl Marx' death and the 100th anniversary of Ernst

Thaelmann's birth. Books on historic personalities, such as Martin Luther and Otto von Bismarck, found recognition beyond the borders of the GDR. Studies of local history also advanced, for example of former German Laender such as Prussia and Saxony, some aspects and periods of German history such as the age of fascism, World War II and economic history. The same applies to the processing of sources and traditions of socialist culture and art as well as to works on the historical understanding and the creative-critical reception of bourgeois and late bourgeois literature and art. All this is evidence of a notable upsurge in the writing of history in our country. Its focus is the exact revelation of genuine historical processes and their evaluation by objective scientific criteria.

4. In recent years the social sciences have been more intensely preoccupied with studies relating to the struggle for peace and disarmament and, by their international efforts and mass political work, actively participated in this struggle. Persuasive results are to hand with respect to the Marxist-Leninist conception of peace and peaceful coexistence, the unity of socialism and peace, the practical realization of the socialist peace policy and the program of the Soviet Union and the other Warsaw Pact nations for disarmament and arms control, the traditions of the peace ideal and the efforts for peace in history, culture, art and literature, to the alliance policy in the struggle for peace, the analysis of new manifestations of the revolutionary world process and the general crisis of capitalism. We may safely assert that an independent Marxist-Leninist peace research has emerged, that all sociological disciplines as well as many natural scientists, engineers and physicians participate in it, and that it provides a valuable contribution in the struggle for a broad coalition of reason and realism.

#### Challenging Tasks

The complexes, trends and projects of the central research plan are decided by the central task for sociologists, cited by Comrade Erich Honecker in the Central Committee report: "Even more comprehensively and profoundly to carry on research on the developmental trends, laws and motive forces of socialism as a united social organism."(9)

The social sciences will continue to focus on studies of the motive forces of socialism, because the ongoing organization of the developed socialist society requires its accomplishments, benefits, features and opportunities to be fully brought to bear. An even more decided interdisciplinary approach is required to understand the complexity of the workings of the motive forces. After all, it is imperative for the social sciences also to examine the social conditions and relations that are the objects of their special research, from the aspect of the conditions and objectives needed for these relations and relationships to give rise to the motive forces of further progress. In this context we will need to intensify interdisciplinary studies on the development of the personalities of the members of our socialist society, their education and entire lifestyle. Comrade Erich Honecker provided us with a significant orientation when he emphasized in the Central Committee Report that "the socialist society will itself be the richer, the richer the development of its members' individuality, and therefore, as it advances, it will provide increasingly favorable conditions for such development."(10)

The Central Committee Report set us the task to give priority to studies of "the conditions for carrying out the economic strategy of our party, for the further organization of the management and planning of the national economy. Expected, therefore, are works dealing with the requirements and motive forces of economic growth by the further speed-up of scientific-technological progress and the comprehensive intensification of the national economy. We need research on the reciprocal interaction of science and production, the interaction of education and the economy, the further realization of the main task in its unity of economic and social policy.

Topics related to the development of the productive forces will continue to be a priority of our work. The Eleventh SED Party Congress left no doubt that mastery of the key technologies, in particular microelectronics, modern computer equipment and biotechnology, is of the first importance for the GDR's future through the turn of the century. "Decided in this field will be the rate of growth of labor productivity, and it will depend on this whether our economy will be able to satisfy the needs of our people, the many internal requirements of our country's development and able also to keep its standing in the world."(12) The comprehensive and speedy use of key technologies results in profound effects and prerequisites in the field of economics, science and education, social relations, the conditions and substance of labor, and intellectual-cultural life. It touches upon all aspects of the socialist lifestyle including the family and leisure. It concerns the organization of social progress in the unity of the development of productive forces and production conditions, the unity of its scientific-technical, socio-economic, political-ideological and intellectual-cultural elements. All social science disciplines should reflect how they could contribute even more--whether directly or indirectly--to the realization of this Eleventh SED Party Congress resolution.

The same attention is due studies with respect to the leading role of the working class and its Marxist-Leninist party, the qualitative changes within the working class, the ongoing development of the social structure, the further organization of democratic socialism, the perfection of socialist democracy as the main trend of the development of the state, and the alliance policy.

The tremendous dynamism in the evolution of science and technology and the socialist society as a whole requires the creative further development of Marxist-Leninist theory and its persuasive and relevant teaching. The analysis, explanation and propagation of the values and benefits of socialism assume immense importance in the further elaboration of our dialectic-materialist ideology and the consolidation of the socialist conscience of our working people. The vivid description of proletarian internationalism and socialist patriotism in the evolution and growth of socialism in the GDR remains an important task.

The history of our people, the workers movement and the GDR, the discovery of our heritage and traditions are of the utmost importance for the education of the young generation and the development of our citizens' pride in our achievements. We are looking forward to new, interesting and varied publications that will illuminate the influence of the past on the present and

future. We are intensively working on the history of our party and its revolutionary traditions. Nor will we omit consideration of any age in German history, such as the still insufficiently researched and described period before 1500 and the emperors and kings of feudalism.

It is a fact that, in the nuclear age, the preservation of peace has become the issue of human survival, the principal condition of any progress. This obligates social scientists to even greater commitment to the struggle for peace, disarmament and international security. They interpret the Eleventh SED Party Congress as an assignment for even more convincingly demonstrating the historic perspective of mankind and helping explain and pursue peaceful coexistence as the only possible organization principle for relations between the countries of the two systems. Comrade Mikhail Gorbachev said the following at the Twenty-seventh CPSU Party Congress: "It definitely seems that the most violent struggle in coming years will concern the issues of the real substance of a policy capable of preserving peace."(13) This struggle also needs to hear from the social scientists, needs their analysis of the situation in the world of capital, their disputes with the "mental stereotypes of confrontation and the effort for military superiority"(14) and their active cooperation in a result oriented political dialogue.

In this connection we will intensify analytical studies of the conditions and main motive forces of the struggle for peace, social progress and revolutionary changes, the alliance policy in the struggle against the most aggressive forces of imperialism and for the prevention of a nuclear holocaust, the creation of a worldwide coalition of reason and realism, the security of socialism's defense capacity and the guarantee of military-strategic equality at a steadily lower level.

We must continue to pursue studies regarding the other problems confronting all of mankind such as the exploration, development and rational use of the earth's raw material and energy sources, the protection and reproduction of the natural environment, the development of the world population and its economic and social living conditions.

We need thorough analyses of the development processes and contradictions of modern day imperialism, including that prevailing in the FRG. The deepening of the general crisis and its effects on the internal and external conditions of life in capitalism, the unequal political and economic development of the imperialist states will be carefully investigated. Research related to the anti-imperialist struggle for peace of the peoples of Asia, Africa and Latin America, the conquest of underdevelopment, and social progress must continue to be resolutely pursued. The real socioeconomic and political processes need to be analyzed.

The severity of the ideological struggle between socialism and imperialism requires profound and comprehensive Marxist-Leninist analysis and the critique of bourgeois ideologies as well as their offensive rejection. By sound theoretical and propagandist work, social scientists help unmask the aggressive and misanthropic nature of the reactionary policy and ideology of imperialism that is dominated by neoconservative social and history conceptions and the reactionary doctrines of late bourgeois thought, such as

militant anticomunism, the crusade strategy, the lie of being threatened and revanchism as well as extreme subjectivism and irrationalism. We need to continue our persuasive dispute with the main trends of present-day bourgeois theories.

At the same time we need more investigations and efforts with regard to the political, ideological and social-theoretical views of bourgeois, social democratic and left oriented forces who champion peace and peaceful coexistence and are or might be elements of a coalition of reason.

We must also strengthen our research efforts with respect to the role of the socialist states and to the political, military, scientific-technological and economic cooperation among the countries of the Warsaw Pact or CEMA, especially the USSR. Joint contracts must be fulfilled at the best possible quality.

#### The Unity of Theory and Practice

In his Central Committee report, Comrade Erich Honecker noted: "Relevance to and influence on practical life represent a decisive criterion for scientific quality."(15) The party congress directs us to the further expansion of the unity of theory and practice as an essential condition for the social sciences to satisfy increased requirements. The statement that it is important above all "even more than hitherto to link science with production and production with science"(16) fully applies to the social sciences, too. The orienting resolutions adopted will be appropriately applied in the sphere of the sociological institutions also.

What does the unity of theory and practice ask of sociological research in present-day conditions?

- Just as any other research, it, too, is subject to the criterion of practical benefits. In this context we consider benefit not only in the economic meaning but in the widest meaning of the usefulness of the results for social progress and its management, the realization of the SED program. The fields of application of the social sciences are as wide and diverse as life itself, and their usefulness can and must therefore be just as diverse. Comrade Kurt Hager said at the SED CC Sociological Conference that it is always imperative "for the work of social scientists to aim for practical benefits for socialism and the struggle for peace and always to measure its quality and efficiency by this usefulness. 'Word and deed for practical life'--that should be the watchword of a socialist social scientist."(17)
- Social scientists will benefit practical life only if their research reveals something new, offers greater knowledge. Research is always linked with the acknowledgment of matured tasks and future developments, with the emergence of new problems and questions, the striving for new knowledge and solutions. It is unnecessary to carry on research regarding existing knowledge. Every social scientist is therefore duty bound to judge his

research performance from the aspect whether it truly represents something new and add to the stock of sociological knowledge.

- The unity of theory and practice presumes that social scientists will obtain exact knowledge of practice, broaden their empirical base and enter more deeply in the real social processes, progressive trends and obstructing factors. Of course the social scientist also needs to study the works written by others before him. Insofar as the library is to be considered a "practice location" to be frequently visited. However, the sociologists should strive for his own empirical-analytical work, apply modern methods of sociology and informatics and carry on actual practical work in the translation of sociological perceptions and in the study of practical experiences.
- The unity of theory and practice not only aims for the practical efficacy of the social sciences but also--organically linked with this--for a high standard and the evidential power of theory. Ultimately theory needs to be sound and well rounded to be effective in practice. That is shown by the experiences of our party in the implementation and further development of the scientific conception of the developed socialist society. Social scientists develop in a constant process of comparing earlier knowledge with new practical experiences, the generalization of these experiences to yield new theoretical knowledge by means of the dialectic-materialist method. Practice needs theoretical generalizations, not simply empirical analyses.
- Sociological research must be more emphatically directed to making available analyses and proposals for the management of social processes, the managements of the party, the government, the economy and the social organizations, and doing so in a form suitable for the purpose of day-to-day management. Daily practice expects offers, methods and approaches, variants for the solution of matured issues. Though not all research can be advanced to this point, the social sciences should more than management science be considered and conducted from the aspect of the utility of their results for management decisions.
- The unity of theory and practice signifies that social scientists must prove their worth as propagandists, ardent champions and persuasive teachers of their own discipline and the ideology of the working class, as fighters at the ideological front. The central research plan emphasises as one of the key points of sociological work the contribution to the development of the socialist consciousness of the working people and to the dispute with anticomunism and anti-Sovietism as well as other reactionary variations of imperialist policy, ideology and culture.
- According to Comrade Kurt Hager, sociology "grips the masses only if correct and practical knowledge is combined with persuasive presentation likely to stimulate activism for strengthening

socialism."(18) Of course, the truth of the statement ranks higher than the style of presentation. Still, it is an important aspect of the transfer of theoretical perceptions to the daily practice of intellectual life, the development of the personality, that the social scientist should know how to argue convincingly, logically, strikingly, without awkwardness or wordiness, unequivocally and--where appropriate--with razor like sharpness.

-- Experience has taught us that the productive unity of theory and practice is guaranteed in the long run only if stable and long-term relations with daily practice are developed. Such relations should be secured and organized by binding agreements between the partners with regard to reciprocal rights and duties and concrete tasks. They should be comprehensive and, in addition to the research effort, include cooperation in the field of training and continuing training, propaganda and cadre development.

The key issue of the unity of theory and practice continues to represent the indissoluble link between Marxist-Leninist social sciences and the policy of the party. The social sciences are political-ideological sciences by their very nature, relations and effects as well as their stock of theories. Strict scientific objectivity and revolutionary party-likeness are united in them. They are not simply a system of knowledge of the laws of society but--as the party program states--"the theoretical and political-ideological tool of the working class and its revolutionary fighting party in the further organization of the developed socialist society and in the conflict with imperialism and bourgeois ideology."(19)

#### FOOTNOTES

1. See Erich Honecker, "Concluding Address at the Eleventh SED Party Congress," NEUES DEUTSCHLAND, 22 April 1986, p 1.
2. See "Bericht des Zentralkomitees der Sozialistischen Einheitspartei Deutschlands an den XI. Parteitag der SED, Berichterstatter: Genosse Erich Honecker" [SED CC Report to the Eleventh SED Party Congress, Reporter: Comrade Erich Honecker], Dietz Verlag, Berlin 1986, p 58.
3. See EINHEIT, No 1/1984, pp 3ff.
4. See EINHEIT, No 11/1983, pp 1003ff.
5. See EINHEIT, No 8/1985, pp 688ff.
6. See EINHEIT, No 12/1984, pp 1074ff.
7. See EINHEIT, No 6/1985, pp 566ff.
8. See EINHEIT, No 2/1983, pp 161ff.
9. See "SED CC Report...," as before, p 58.

10. *Ibid*, pp 59/60.
11. *Ibid*, p 58.
12. *Ibid*, p 49.
13. "Political Report by the CPSU CC to the Twenty-seventh CPSU Congress, Reporter: M.Gorbachev," Dietz Verlag, Berlin 1986, p 17.
14. "SED CC Report...," as before, p 10.
15. *Ibid*, p 58.
16. *Ibid*, p 26.
17. Kurt Hager, "Laws of Our Age--Motive Forces and Values of Socialism" *EINHEIT*, No 1/1984, p 116.
18. *Ibid*.
19. "Programm der Sozialistischen Einheitspartei Deutschlands" [SED Program], Dietz Verlag, Berlin 1976, p 46.

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SOCIOLOGY

GERMAN DEMOCRATIC REPUBLIC

HISTORIOGRAPHY COURSE CHARTED FOLLOWING PARTY CONGRESS

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[Article by Prof Dr Ernst Diehl, member of the SED Central Committee and deputy director of the SED Central Committee's Institute for Marxism-Leninism: "History--a Source of Strength for Further Progress"]

[Text] The future oriented decisions by the Eleventh SED Party Congress represent a significant challenge to our historiography also.

At each stage of our party's struggles, the knowledge of history, of historic experiences and teachings have been an indispensable source of strength for the understanding, the organization and realization of its policy, for the deepening of revolutionary views, the definition of socialist patriotism and proletarian internationalism. This trusted principle retains its full validity and is simultaneously given new outlines as we are beginning now to tackle the domestic and foreign policy tasks resolved upon by the party congress and turn our eyes toward the year 2000. Considering the objective interaction of past, present and future, Erich Honecker concluded: "Anyone consciously comprehending the revolutionary achievements of our earlier development will devote his entire strength to reinforcing and multiplying them on the way to the new millenium, in other words to carrying the banner of our tremendous accomplishments beyond the year 2000."(1)

The issue of war and peace, the burning question of the present-day development of mankind, quite particularly requires us to think in historical dimensions. At its Eleventh Congress and in complete unanimity with the Twenty-seventh CPSU Party Congress, our party supplied a clear answer to the question of what needs to be done to preserve peace and permanently secure it for future generations. This is happening in a situation where the threat to peace, rooted in imperialism, has assumed unprecedented dimensions, when, for the first time, it is a matter of human survival. The responsibility arising therefrom for the future and the survival of mankind also signifies responsibility before the history of mankind, commitment to the preservation and the continued pursuit of everything that is progressive and humane and was accomplished in various ages.

In its efforts for the realization of the party congress resolutions, GDR historiography starts from good results in the last 5-year plan period. Significant new knowledge was gained in all its spheres, purposeful work done on research projects, and much of the latter has already been published. Our party's orientation has demonstrably been most opportune, far sighted and fruitful, involving as it does the broad and diverse treatment of historical topics of historic-materialist positions, the balanced relationship of national and international historic problems as well as the use of the most varied media for the interesting and vivid representation of historical material.

The 1986-1990 central research plan of the Marxist-Leninist social sciences insists on the need to further pursue this satisfactory development by the accomplishment of new tasks. We historians will be well advised to interpret the Eleventh SED Party Congress resolutions primarily as a challenge to ourselves, our high scholarly standards and the increased social relevance of our studies. Erich Honecker's general remarks in the CC report to the Eleventh SED Party Congress about the commitment of the scholar, the critical and creative atmosphere of scholarly pursuits, the struggle for the greatest possible mastery and top standards of research apply to historiography also and, building on many good earlier examples, need to be brought to bear even more comprehensively.

#### To Study and Present History Effectively

The study and presentation of the fighting road traveled by our revolutionary party for almost 150 years--from its beginnings to the organization of the developed socialist society in the GDR--remains a central task for our historiography. The efforts of the revolutionary advance guard of the working class--guided by our scientific doctrine--and its allies was decisive for the victory over imperialism, militarism and fascism in the heart of our Continent, for the most thorough turn in the history of our people in the sign of socialism and peace. As lately once again demonstrated at the celebration of the 100th anniversary of Ernst Thaelmann's birth and the 40th anniversary of the merger between the KPD and SPD into the Socialist Unity Party of Germany, awareness of this historic achievement, the efforts of many generations of revolutionaries in the service of the people, represent a major source of the evolution of sound convictions regarding the triumph of our cause, profound understanding of our party's policy and the ability together with all working people to successfully convert it to action. The work on the four-volume "Geschichte der Sozialistischen Einheitspartei Deutschlands" [History of the SED] is proceeding and needs to be completed. This will provide us with new starting positions, and further studies and presentations of party historical oisssues will have to be based on them.

In recent years, our historians have become better equipped to more profoundly perceive as well as vividly and diversely present the history of our socialist fatherland as a solid element of the socialist community, the vital expression of the achievements, values and benefits of socialism. Looking at the 40th anniversary of the GDR's establishment and the 5th decade of our worker-and-farmer state, new studies aim to further reveal and help our people to become conscious of its history in the specificity and diversity of its

references, its wealth of problems and lasting results. It is intended that volume 9 of the multivolume "Deutsche Geschichte" [German History], dealing with the years 1945-1949, is to be available in 1989. This will be the beginning of the most comprehensive representation of GDR history, designed to take up 4 volumes. At the same time future studies will benefit considerably from the intended publication in the next few years of sound source materials about the history of the GDR.

We must take conscious note in our work of the change in generations. This applies specially to the method of the representation of GDR history. Our younger citizens will only be able by the knowledge of our history to fully comprehend and convert to motivation for their own actions the severity of the struggle for our socialist achievements, our allies and enemies in that struggle; the contribution to social security and the high educational standard of the citizens of our country and their peaceful life by our party's Marxist-Leninist policy, by real socialism. The Central Committee report to the Eleventh SED Party Congress points out the attention due the further refinement of history teaching in general and the history of the GDR in particular at our general educational polytechnical secondary schools. The Ministry for Public Education supervises these efforts, and historians from various historiographical institutions are involved in them by way of cooperating in the revised version of history textbooks. That is an interesting and responsible task for arousing a lively socialist consciousness of history in the young generation. At the same time it involves a presentation of GDR history that more and more emphatically takes into account just this generation's world of concrete experiences and notions as well as their awareness of outstanding problems.

The statements and decisions of the Eleventh SED Party Congress offer strong impulses for the study and presentation of the latest segment in our development, characterized by our struggle for the organization of the developed socialist society: The historic importance of the Eighth SED Party Congress in the history of our party and republic is becoming steadily more evident. That congress emphasized the meaning of socialism, that is the well-being of man and, as a result of this orientation, the interaction of economic and social progress developed powerfully, living conditions for millions of citizens changed for the better and more lastingly than in any previous age. It is therefore increasingly important to more thoroughly study and present our domestic and foreign policy development since the early 1970's--a segment of time already almost as long as the entire transitional period--with its specific features and results. This should also affect the division of labor and specialization among those historians whose subject matter is the history of the GDR.

To be further pursued--across all stages of development--are studies relating to the history of various aspects and spheres of internal development as well as the GDR's foreign policy, the SED's defense policy, work on the history of the FDGB, the FDJ and the pioneer organization will continue. Collectives are preparing surveys of the history of other mass organizations.

Appropriate to their importance for the present and future of our republic, it is necessary among the wealth of topics involved in the history of the GDR to

stress the history of the party's economic policy, the GDR's economic history. The above mentioned exhaustive presentations and surveys assign their due status to the decisive related problems. At the same time we urgently require special studies to be further pursued or begun on the history of socialist industry and agriculture, the historic experiences of socialist planning, the evolution of the activist and competition movements as well as the development of economic cooperation with the Soviet Union and the other socialist countries. Other steps are taken to develop from the aspect of history the experiences and results achieved since the Eighth SED Party Congress with regard to the main task, the realization of intensification, the mastery of scientific-technological progress. These are capable of directly contributing to the understanding and implementation of the economic strategy resolved upon by the Eleventh SED Party Congress.

Our history must in general devote further thought to the conclusions arising from the central place value of the organic combination of the scientific-technological revolution for the course of the worldwide class conflict. It would therefore be appropriate if--well beyond the current planning period and as the result of the interdisciplinary cooperation of experts from various natural and social sciences--studies related to the history of engineering and the material productive forces in general as well as the history of the natural sciences in the GDR were to be reinforced and extended to all stages and all important spheres, in particular because interest in this topic has risen substantially. Studies and publications with respect to the history of the local workers movement, the history of enterprises and the history of regions, cities and villages continue to gain importance for the enrichment and broadening of our socialist historic image. Ranging from detailed overall presentations at a high scientific standard to smaller and mass effective publications, picture/text publications and chronicles, a multitude of projects will need continued pursuit, and the overall satisfactory development of past years have to advance to new results. In future also we must encourage and back the activism of tens of thousands of comrades and friends who commit themselves to the study and presentation of regional and enterprise history in the history and tradition commissions of the party and mass organizations, the Society for Local History in the GDR Cultural League, the study groups for regional and local history at the bezirk and kreis councils, and so on, thereby helping deepen affection for our socialist homeland.

In our future work on the history of the GDR, whatever the specific subject matter, we will again observe the tried and tested principle of studying and presenting the socialist construction, the organization of the developed socialist society mainly as the joint achievement of millions of working people, their chance for proving themselves, the field of study and change of members of all classes and strata, led by the working class and its party. Mass endeavors aimed at outstanding performances to strengthen socialism and preserve peace, to realize socialist democracy, sharpen socialist modes of thought and behavior at the work place, in the residential district, in the family and the totality of human life--these decisive humanist features and motive forces of socialism that frequently emerged from conflict and dispute--must be vividly described by historiography over and over again. Inspiration and moral impulses may well result from the concrete example of a collective or a personality--whether in production, research, intellectual-cultural life,

or wherever--, and encourage the creative atmosphere and lifestyle that we need to realize the resolutions of the Eleventh SED Party Congress.

### Revealing the Historic Heritage in its Entirety and Diversity

In the Central Committee Report to the Eleventh SED Congress, Erich Honecker explained that "we continue to assign great importance to the nurture, preservation and spread of the humanist cultural legacy."(2) Moving on from earlier achievements, we are advancing toward the revelation and presentation of our historic heritage in its entirety, specially those historic traditions that are at the root of our socialist society and acknowledged as such by the citizens of our workers-and-farmers state. Since the Tenth SED Congress the work of historians has contributed in precisely this context to the achievement of a higher quality in the historic-materialist approach to our heritage and traditions. This occurred by way of correspondence and, frequently, fruitful interaction with the respective activities in other social sciences as well as art and literature, radio and television. Our evidence is the echo aroused in the GDR and beyond its borders by the celebration of Martin Luther, critical and differentiating biographies of the Hohenzollern King Frederick II and Bismarck as well as publications about the history of Prussia, Saxony and other regional German Laender. Welcomed with much interest from this aspect, too, were the first four volumes of "German History," the most comprehensive yet Marxist-Leninist overall presentation of German history.

Our German socialist state, the German socialist nation evolving in and with it, did not arise in a historic vacuum. However many people, mainly in the FRG, still prefer to keep their eyes averted from this fact, they emerged from German history as a whole, are based on the achievements and struggles of all those who championed social progress in the various ages and in differing social conditions. As practical experience has confirmed, the revelation of the fruitful interaction between this heritage, these traditions and the present socialist age is a process in itself. It obtains constantly fresh impetus from the dynamism of the organization of the developed socialist society, the changed requirements of the international class conflict and the internal processes of maturation in our science and culture. By these Eleventh SED Party Congress decisions we are projecting our forces to tasks pointing well into the future, and, at the same time, remain deeply rooted in the historic soil that nurtured our German socialist state.

We will continue to focus our efforts on the celebration of the revolutionary traditions of our society. The tribute to Thomas Muentzer on the occasion of the 500th anniversary of his birth in 1989 will provide an occasion to bring to bear our new and more sophisticated perception of the Reformation and the Peasant War gained in recent years for a deeper insight in this major revolutionary personality. We will show why our socialist society feels a very special obligation to Thomas Muentzer who boldly called for the mobilization of the popular masses against the feudal power in the first revolution of German history, with the objective of the radical transformation of society.

New research results to be unveiled at the 150th anniversary of August Bebel's birth in 1990 will illustrate the preeminence of this great German Marxist workers' leader in the history of our party, the struggle of the German working class against exploitation, militarism and war, for a socialist Germany. Other studies and publications on the history of 1 May, the history of the International Women's Day and some anniversaries of the German labor movement are also devoted to the revolutionary traditions of the German workers' movement.

At the same time we will carry on our assignment to reveal the totality of humanist and progressive traditions of German history in the most diverse social spheres--in politics and economic just as much as in science and culture--, and make it fruitful for our socialist society. New and deeper insights are to be expected from volumes 5-8 of the "German History," that deal with our history from 1871-1945.

The increasingly comprehensive revelation of the historic ages before the Reformation and the Peasant War are of considerable importance for the knowledge of the historical roots of the GDR. Much also remains to be done to make sure that progressive events, processes and personalities from many centuries of feudalism are assigned their proper place in the traditions of the GDR. Studies related to the history of feudal peasant-serfs as the chief exploited class in feudalism may contribute to this knowledge just as much as the biographies of some German kings and emperors of the Middle Ages.

Such studies and other works on the history of German regional states and the history of capitalist and, lastly, imperialist Germany, we further direct attention to a differentiated approach to the role of the exploiter class in history, an approach tailored to the respective concrete conditions. The involvement of these classes or some of its individual representatives in social progress--however limited--will preoccupy our historical research and representation in future, too. This includes reasoned critique as well as principled disputes with reactionary attitudes. Investigations of the relationship between the bourgeoisie and the absolutist state in the 18th Century will help here, just as much as studies relating to the role of the German bourgeoisie from the middle of the 19th Century through 1917/1918. The 3-volume "Geschichte der Produktivkraefte in Deutschland 1789 bis 1945" [History of the Productive Forces in Germany 1789 to 1945], soon to be published in toto will present important new notions as the result of many years of economic historiography.

The increased interest in socio-historical studies in GDR historiography will be displayed in other investigations, mainly relating to the history of the proletariat and the farmers in capitalist Germany. In this context we see more and more clearly how much such results depend on the complex approach to the subject matter that involves social, political, economic and ideological processes and their interaction, and how necessary it is to allot ample room to the elucidation of the problems of working and living conditions, the every day life of the working people in general. That aspect also needs to be included in our reflections about the breadth and diversity of our socialist traditions.

## The Preservation of Peace Obligates Us

The Eleventh SED Party Congress call for a resolute struggle for peace, against the threat of a nuclear holocaust, strengthens the resolve of historians to contribute to the preservation of peace by the resources of their scholarship and in the most effective manner. We are more than over bidden to consciously bring to bear the appropriate historical experiences and teachings for the survival of mankind, to lend strength to world conscience so as to prevent a nuclear disaster.

Furthermore, several projects will be devoted to the indispensable task in conflict with imperialist historiography to define those class forces that are interested in war. The 75th anniversary of the outbreak of World War I and the 50th anniversary of the beginning of World War II in 1989 will provide an occasion by means of historical facts to reveal the sources of the threat of war inherent in the imperialist system. We will emphasize the wider as well as the immediate prehistory of the two world wars--above all the second one. This accords with Lenin's demand for revealing the secrets that spawn wars. We will consider events in the camp of imperialism in general and, at the same time, trace the special responsibility of the aggressive forces of German imperialism for these world wars. Simultaneously we need to tackle the urgently needed discovery of the historical facts regarding imperialist aggression and imperialist warlike adventurism in the more than 40 years since the destruction of German fascist imperialism. This includes studies of the foreign policy of imperialist states in the field of tension between the "Cold War" and peaceful coexistence since 1945.

Other historical studies and presentations concentrate on illustrating the struggle for peace as an intrinsic element of the struggle for the realization of the historical mission of the working class. The preparations for the 70th anniversary of the Great October Socialist Revolution will provide us with a special occasion by new facts and issues to reveal and bring to the consciousness of mankind as a whole the unity of socialism and peace, the historic merit of the Soviet Union in the fight against imperialist aggression and for a permanent peace. Historical surveys and specialized studies will elaborate the immeasurable material and intellectual potential as well as the great political experience available to the Soviet Union and the socialist countries in the struggle for peace, advantages that they are able to utilize in the fateful fight for the continued existence of humanity.

Future studies and presentations also need to emphasize the historical achievement of our party and our republic. At the side of the Soviet Union, and despite all imperialist efforts, they have labored successfully for many years so that no war may ever again originate on German soil. Linked descriptions of the work of the revolutionary party for peace until 1945 and of the SED's struggle for peace and European security from 1945 to the present day are directed to that objective. They demonstrate the fundamentally new situation that, thanks to the strength of socialism, has arisen in recent decades at a sensitive area of world politics in the struggle for peace. At the same time they help gain greater insight in the great opportunities for permanently securing peace.

Other studies pursue the objective from the aspect of history to analyze the response of various forces and movements to this question that is so vital to humankind. They include, among others, studies relating to the relationship of the international social democratic movement to war and peace, to the history of the pacifist movement in Germany before 1945 or the struggle of the working class in capitalist countries against imperialist nuclear war policy, to the change in international relations since 1945. A volume of collected writings on the historical experiences of the struggle to make the policy of peaceful coexistence prevail is in preparation by interdisciplinary cooperation. All such studies yield knowledge that we may now use in the struggle for a worldwide coalition of reason and realism.

In addition to the projects mentioned, the complex group of problems relating to war and peace is being dealt with in many studies of various ages and in all spheres of our science of history. It will be the focus of the 1988 Congress of GDR Historians. At the same time we must at all times be aware that these issues actually affect every single historical topic in view of the present situation when, for the first time in world history, mankind is faced with extinction.

The politics of those who are willing for narrow class interests to gamble with the fate of mankind not only endanger further social process, they may result in the end of human history. On the other hand those who resist this extremely dangerous course and champion lasting peace thereby defend everything that mankind has achieved since its emergence in a highly contradictory but ultimately ascending historical process and thus secure its continuity and higher development in the conditions of lasting peace. All that inspires the historians of the socialist GDR to examine every single topic they handle with a view to this enormous responsibility--a responsibility unprecedented among former generations of historians.

We will also keep in mind these great world historical connections when our science carries on further preparations for the 200th anniversary of the Great French Revolution. It is generally helped by the considerable upswing that is occurring in the field of general history and reflected in more studies and publications on problems of the history of the socialist world system and the international workers' movement, the history of capitalist and developing countries and the history of international relations.

All fields of GDR historiography, even those not mentioned in this survey, will therefore endeavor in the years to come with new achievements to contribute to the deepening of our historically justified optimism, to the awareness of the victorious advance of the cause of socialism and the further enrichment of intellectual life in our society. They thus are actively involved in the further realization of the policy, reaffirmed by the Eleventh SED Party Congress, for the benefit of the people and the preservation of peace.

FOOTNOTES

1. Erich Honecker, "Youth Is Organizing our Socialist Present and Future Revolutionary Elan," NEUES DEUTSCHLAND, 1 October 1985, p 3.
2. "Bericht des Zentralkomitees der Sozialistischen Einheitspartei Deutschlands an den XI. Parteitag der SED, Berichterstatter: Genosse Erich Honecker" [SED CC Report to the Eleventh SED Party Congress, Reporter: Comrade Erich Honecker], Dietz Verlag, Berlin 1986, p 71.

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